

PACIFIC LINGUISTICS

Series B - No. 76

A GRAMMAR OF THE URBANISED TOBA-BATAK OF MEDAN

by

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First published 1981.

The editors are indebted to the Australian National University for help in the production of this series.

This publication was made possible by an initial grant from the Hunter Douglas Fund.

National Library of Australia Card Number and ISBN 0 85883 237 2

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PREFACE

This study of one of the most important languages of Sumatra is a revised and expanded version of my doctoral dissertation, presented at Yale University in 1964. In undertaking this revision I have aimed above all to verify my findings and, wherever possible, to extend the factual coverage. I consider myself fortunate in having had the opportunity to work with a native speaker of Toba-Batak while this was being done. I have also derived benefit from consulting two doctoral dissertations written by native speakers which have been completed since 1964.

I should like to take this opportunity to express my sincere thanks to my informants, and also to Professor Isidore Dyen of Yale University, who introduced me to the study of the Austronesian languages and supervised the writing of my dissertation.

W. Keith Percival
May 1980

CHAPTER I
INTRODUCTION

Toba-Batak is an Austronesian language spoken on the island of Sumatra to the east, south, and south-west of Lake Toba, and on the island of Samosir in Lake Toba. The exact geographical extent of the speech community at the present time is not known; one presumes that it is still roughly as Esser indicated in his linguistic map of Indonesia in the *Atlas van tropisch Nederland*, published over forty years ago.

Many political upheavals have occurred since that time. In particular, the Bataks were involved in the rebellions against the central government which took place in the late 1950s; as a result of the ensuing political insecurity extensive migrations occurred which left some country districts less densely populated than previously and added appreciably to the number of Bataks living in the city of Medan. The precise extent of these demographic shifts will not be known until fresh linguistic cartography is undertaken. For this reason, our knowledge of the geographical distribution of the Batak peoples will remain largely conjectural for some time to come.

It has been customary to refer to the Batak languages as 'dialects', but the propriety of this term is questionable. Karo, for example, differs from Toba so much that mutual comprehension is not possible. In his *Critical Survey of Studies on the Languages of Sumatra* (1955), Voorhoeve distinguishes two main dialect groups. The northern group consists of Karo, Alas, and Dairi, and the southern group of Toba, Angkola, and Mandailing. Intermediate between the two he places Simalungun.¹

Moreover, Toba-Batak itself is not uniform. Voorhoeve emphasises that it comprises many sub-dialects. Nababan, in his 1966 dissertation,

enumerates five geographical varieties which, according to him, are distinguished by speakers of the language. They are Samosir, spoken on the island of Samosir, Toba Holbung, spoken on the plain to the east and south of Lake Toba, Humbang, spoken in the mountains south of Toba Holbung, Silindung, spoken in the valley south of Humbang, and Hullang, spoken in the mountains south-west of Humbang as far as Upper Barus. It is not known, of course, to what extent this classification has any genuine linguistic basis.

My informants were also keenly aware of different varieties of the language, referring most often to the difference between the speech of country dwellers and their own urbanised dialect. They usually explained this difference as a consequence of the close contact which urban dwellers have with speakers of Sumatran Malay and Bahasa Indonesia, people in rural areas being less exposed to these outside influences. Furthermore, the influence of the national language has greatly increased since Independence, especially among younger speakers who have been to secondary school or university. A further fact which should be borne in mind is that the Batak migrants in Medan originally came from different parts of the Batak speaking area and are, moreover, socially stratified. It seems unlikely, therefore, that their speech is uniform.

Superimposed on these differences between urban and rural dialects and the differences within the urbanised dialect of Medan, there is also a marked contrast between colloquial and formal styles of speech. Prior to the arrival of the Dutch, the Bataks, like other Indonesian peoples, had a rich repertory of folk tales (*turiturian*), riddles (*tortorhanan*), and several genres of poetry (*uppama*, *edde*, and *addung*).² In addition to this vigorous oral tradition, there existed a written language which employed an indigenous alphabet, was devoted in the main to magic, and is preserved in bark books (*pustaha*).³ After the Bataks were converted to Christianity, another kind of written literature emerged, consisting of Bible translations and devotional material. The vocabulary and phraseology used in this literature are familiar to most speakers of the language. Moreover, special speech styles of a more traditional kind have continued to be used on ceremonial occasions. The complex interplay of these many varieties of speech has yet to be investigated.

The present study is based on the speech of three informants: Miss Minar Tobing and Mr Apul Tobing, both students at Yale University, and Mr Bennet Silalahi, a student at the University of Kansas. The Tobings were originally from Silindung but grew up in Medan. Mr Silalahi was

from Pansur Batu, had a Malay mother, had lived for many years away from his birthplace, and at the time I worked with him was an employee of the Malaysian government in Borneo. However, he continued to speak Toba-Batak with his wife, who was from the island of Samosir but whom I regret I was never able to interview.

Mr Tobing acted as an informant in a course on linguistic analysis in the spring term of the academic year 1957-58. I was enabled to work with Miss Tobing during the academic year 1959-60 by a generous grant from the American Council of Learned Societies. One other informant, Mr Bili Napitupulu of Porsea, was interviewed for a few hours in November 1959. My doctoral dissertation, which was based almost entirely on the speech of the Tobings, was completed in the summer of 1963 and defended in the following spring. Subsequently, assisted by grants from the University of Kansas, I worked with Mr Silalahi during the academic years 1970-71 and 1976-77. The revision of my dissertation was completed in the summer of 1977.

The Batak languages are among the better-known Austronesian languages. The first scholar to study them, Hermanus Neubronner van der Tuuk (1824-94) was sent to the East Indies by the Dutch Bible Society in 1849 and spent the years 1851 to 1857 in Sibolga and Barus, gaining first-hand knowledge of three Batak dialects: Toba, Dairi, and Mandailing. After returning to Holland, he published a four-volume collection of texts (1860-62), a Batak-Dutch dictionary (1861), and a grammar in two parts (1864, 1867). His description of Toba was based on the dialect of Upper Barus. His grammar is a monument of painstaking accuracy and has not to this day been superseded. The coverage of morphology is especially comprehensive. Syntax, on the other hand, while not ignored, is nowhere presented in a systematic fashion. An English translation of Van der Tuuk's grammar, with a valuable introductory essay by A. Teeuw, was published in Holland in 1971.

Meerwaldt's textbook, published in 1904, cannot compete with Van der Tuuk's grammar in coverage, but it offers a lucid survey of the main grammatical phenomena, including the syntax. It also contains a useful collection of texts and a glossary.

Warneck's Toba-German dictionary, which first appeared in 1906 and had recently been reprinted, is an invaluable supplement to Van der Tuuk's dictionary. It is especially informative on the subject of nominal and verbal derivatives. Many entries contain proverbs, illustrative sentences, and material of ethnological interest. A revised edition, supplemented with Winkler's material, has recently appeared in Holland (1977).

Marcks's Toba-Batak primer (1912) can still be used with profit. It contains graded translation exercises from and into German with grammatical commentary.

Braasem, in a book published in 1951, presents an account of the various genres of traditional Batak literature. His Dutch translations of three folk tales from Van der Tuuk's collection are especially useful. The book also contains an extensive bibliography of primary and secondary source materials.

Nababan's study of Toba-Batak phonemics (1958) is a well-organised and carefully presented analysis of the facts of Toba-Batak pronunciation. It contains especially valuable discussions of vowel length and phonotactics. It is clear that Nababan's dialect is the same as the one spoken by my informants.

Nababan's doctoral dissertation (1966) is an attempt to describe the whole language. It comprises an extremely brief account of the phonology, somewhat fuller treatments of the morphophonemics and syntax, and a central section on the morphology. There is a sample literary text with grammatical analysis. It is unfortunate that the coverage of many basic phenomena is inadequate and that the arrangement of the material lacks perspicuity.

Silitonga's dissertation (1973) is in a purely theoretical vein and concentrates on three syntactic phenomena: topicalisation, question formation, and relative clauses. The author uses a version of generative-transformational grammar as his theoretical framework, but it is unfortunate that he comes to no firm conclusions. However, he succeeds in presenting much fresh information on the syntax of the language, which is certainly welcome. It may be noted in passing that the dialect he describes is especially rich in Indonesian borrowings. One must, however, deplore the fact that he transcribes his examples in traditional orthography; it would have been helpful if he had at least indicated the position of stress.

In the present study, I make explicit reference to analyses by previous investigators only in footnotes, which are numbered consecutively beginning afresh with each chapter and placed at the end of the chapter in question. Where I cite data other than those provided by my informants, they are so identified. It should be emphasised that my aim has been to describe the speech of my informants, not Toba-Batak as a whole. No attempt has been made to treat the literary language, but literary forms which occur in the speech of my informants have perforce been cited.

Readers already familiar with earlier treatments of Toba-Batak will be struck by the fact that the dialect of my informants differs appreciably from the language described by Van Der Tuuk, Meerwaldt, and others. A number of factors are involved. First, nineteenth-century grammars of the language were based on textual material. For example, it appears that Van der Tuuk did not elicit samples of spoken Toba-Batak from his informants, but instead had them write down texts for him, which he then subjected to grammatical analysis. We have, therefore, little direct knowledge of the colloquial language of Van der Tuuk's day. Second, the dialect described by Van der Tuuk was spoken in Upper Barus, i.e. quite a distance from the area from which my informants' families originated. Third, the Toba-Batak which has developed in the city of Medan since the extensive migrations of the past few generations, has characteristics of its own, in particular a certain degree of morphological simplification. It is unfortunate, however, that we have little or no information about the present-day rural dialects of Toba-Batak. I have, therefore, abstained from making detailed comparisons between the speech of my informants and what one might term 'classical' Toba-Batak, i.e. the literary language described by scholars in the past.

The following is a list of the literature consulted, including works on general linguistics.

BIBLIOGRAPHY

BRAASEM, W.A.

- 1951 *Proza en poezie om het heilige meer der Bataks: de Bataks en hun volksletterkunde*. Met een voorwoord van Professor Dr J. Gonda, Hoogleraar te Utrecht. Djakarta: De moderne Boekhandel Indonesia.

BRUNER, Edward M.

- 1963 'Medan: the Role of Kinship in an Indonesian City'. In Alexander Spoehr, ed. *Pacific Port Towns and Cities: A Symposium*, 1-12. Honolulu: Bishop Museum Press.

DYEN, Isidore

- 1965 *A Lexicostatistical Classification of the Austronesian Languages*. (Indiana University Publications in Anthropology and Linguistics, Memoir 19 of the *International Journal of American Linguistics*.) Baltimore: Waverly Press.

ESSER, S.J.

- 1938 Talen. Map 9b in *Atlas van tropisch Nederland*, published by the Koninklijk Aardrijkskundig Genootschap in conjunction with the Topografischen Dienst in Nederlandsch-Indië. Amsterdam/Batavia. Map reproduced at end of Voorhoeve 1955.

HAZEU, G.A.J.

- 1907 *Gajōsch-Nederlandsch woordenboek met Nederlandsch-Gajōsch register*. Batavia: Landsdrukkerij.

JOUSTRA, M.

- 1907 *Karo-Bataksch woordenboek*. Leiden: E.J. Brill
- 1922 *Nederlandsch-Karosch woordenlijst*. (Uitgaven van het Bataksch Instituut, 20.) Leiden: S.C. van Doesburgh.

LOEMBANTOBING, Arsenius

- 1919a *Angka toeritoerian ni halak Batak*. (Uitgaven van het Bataksch Instituut, 16.) Leiden: S.C. van Doesburgh.
- 1919b *Nipi ni Ama Ringkot*. (Uitgaven van het Bataksch Instituut, 17.) Leiden: S.C. van Doesburgh.

MARCKS, O.

- 1912 *Kurze praktisch-methodische Einführung in die Bataksprache*. Laguboti: Missions-Druckerei.

MEERWALDT, J.H.

- 1904 *Handleiding tot de beoefening der Bataksche taal*. Leiden: E.J. Brill.

NABABAN, P.W.J.

- 1958 *A Phonemic Analysis of Batak*. M.A. thesis, University of Texas, Austin, Texas.
- 1966 *Toba Batak: A Grammatical Description*. Doctoral dissertation, Cornell University, Ithaca, New York.

NEUMANN, J.H.

- 1922 *Schets der Karo-Bataksche spraakkunst*. (Verhandelingen van het Bataviaasch Genootschap van Kunsten en Wetenschappen, 63/4.) Weltevreden: A. Emmink/ The Hague: Nijhoff.

OPHUIJSEN, Ch.A. van

- 1914 *Bataksche teksten: Mandailingsch dialect.* Leiden: S.C. van Doesburgh.

PERCIVAL, W. Keith

- 1964 *A Grammar of Toba-Batak.* Doctoral dissertation, Yale University, New Haven, Connecticut.

SILITONGA, Mangasa

- 1973 *Some Rules Reordering Constituents and their Constraints in Batak.* Doctoral dissertation, University of Illinois, Urbana, Illinois.

STAP, Herm. W.

- 1912 *Nederlandsch-Tobasche woordenlijst.* (Uitgaven van het Bataksch Instituut, 8.) Leiden: S.C. van Doesburgh.

TUUK, H.N. van der

- 1860-62 *Bataksch leesboek, bevattende stukken in het Tobasch, Mandailingsch en Dairisch*, 1. stuk (vol.1), 1860: *Stukken in het Tobasch*; 2. stuk (vol.2), 1861: *Stukken in het Mandailingsch*; 3. stuk (vol.3), 1861: *Stukken in het Dairisch*; 4. stuk (vol.4), 1862: *Taalkundige aantekeningen en bladwijzer, vertaalde stukken en inhoudsopgave tot de drie stukken van het Bataksch leesboek.* Amsterdam: Frederik Muller.
- 1861 *Bataksch-Nederduitsch woordenboek.* Amsterdam: Frederik Muller.
- 1864 *Taco Roorda's beoefening van 't Javaansch.* Amsterdam: R.C. Meijer.
- 1864-67 *Tobasche spraakkunst*, 1. stuk (vol.1), 1864: *Klankstelsel.* Amsterdam: Frederik Muller. 2. stuk (vol.2), 1867: *De woorden als zindeelen.* Amsterdam: Depot van der Nederlandsch Bijbelgenootschap.
- 1866 *Kurzer Abriss einer Batta'schen Formenlehre im Toba-Dialekte.* Nach einem Dictat von H.N. van der Tuuk, verdeutscht durch August Schreiber. Barmen: Missionshaus.

- 1962 *De pen in gal gedoopt*. Brieven en documenten verzameld en toegelicht door R. Nieuwenhuys. Amsterdam: G.A. van Oorschot.
- 1971 *A grammar of Toba Batak*. Translated by Jeune Scott-Kemball, edited by A. Teeuw and R. Roolvink, with a foreword by A. Teeuw. (Koninklijk Instituut voor Taal-, Land- en Volkenkunde, Translation Series, 13.) The Hague: Martinus Nijhoff.

VOORHOEVE, Petrus

- 1955 *Critical survey of studies on the languages of Sumatra*. (Koninklijk Instituut voor Taal-, Land- en Volkenkunde, Bibliographical Series, 1.) The Hague: Martinus Nijhoff.

WARNECK, Joh.G.

- 1906 *Tobabataksch-deutsches Wörterbuch*. Batavia: Landsdrukkerij. Reprinted by Verlag der Rheinischen Missions-Gesellschaft, Wuppertal-Barmen, n.d.
- 1977 *Toba-Batak-Deutsches Wörterbuch, mit den Ergänzungen von Joh. Winkler*. Neu herausgegeben von R. Roolvink. Mit einem Register Deutsch-Batak von K.A. Adelaar. (Koninklijk Instituut voor Taal-, Land- en Volkenkunde.) The Hague: Martinus Nijhoff. (The edition will be referred to as Warneck-Winkler.)

GENERAL BIBLIOGRAPHY

HOCKETT, Charles F.

- 1947 'Problems of Morphemic Analysis'. *Language* 23:321-43
- 1954 'Two Models of Grammatical Description'. *Word* 10:210-31.

NOTES

1. On the basis of lexical statistics, Dyen finds that Simalungun is equidistant from Karo and Toba-Angkola (Dyen 1965:27), and comments as follows on the relationship within the southern group: 'Interestingly enough, one Toba list scored slightly higher with one of the two Angkola lists than with the other Toba list' (1965:28). Braasem (1951:36) cites the following figures from the 1930 census for the numbers of speakers of the various Batak dialects: Karo 154,350; Pakpak and Dairi 20,144; Simalungun 96,135; Toba 597,748; Angkola 86,555; Mandailing 134,783.

2. Uppama is thus defined by Warneck (1906:230; Warneck-Winkler 1977:283): 'Gleichnis, Bildrede, Sprichwort, verziertes Verschen von 2 oder 4 Zeilen, deren 2 erste oft nur zur Verzierung der Rede dienen, oft gereimt.' cf. Braasem 1951:54-73. The edde had the same metrical form as the uppama, but were devoted to amorous topics: see Braasem 1951:74-84. The addung were lyrical poems in which a widow mourned the loss of a husband, or a mother the loss of a child: see Braasem 1951:85-91. According to one of my informants, addung singers are still active to this day in some country districts.

3. For accounts of the indigenous script, which is of Indic origin, see Van der Tuuk 1964-67, paragraphs 1-21, and 33; Meerwaldt 1904: 1-2, 118-120; Neumann 1922:4-6. It has been customary for the past half-century to write the Batak languages in roman script. I have not used the current orthography in this study, but the morphophonemic transcription developed in Chapter III and used in the last two chapters is close enough to it to occasion readers familiar with it little or no difficulty.

CHAPTER II

PHONOLOGY

1. SEGMENTAL PHONEMES

The segmental phonemes of Toba-Batak are as follows:

Oral stops	p t k b d g
Glottal stop	q
Fricatives	s h
Affricates	c j
Nasals	m n N
Liquids	l r
Semi-vowels	y w
Vowels	i e E a 0 o u ə

Except for glottal stop all consonants occur in two lengths; a long consonantal segment is analysed here as a sequence of two identical short segments.

Oral stops occur in tense-voiceless and lax-voiced pairs at three points of articulation: bilabial, alveolar, and velar. Voiceless stops are not noticeably aspirated before vowels. In normal rapid speech they are unreleased utterance-finally and before another stop. Final voiceless stops are sometimes released in slow deliberate speech.

The two affricates, one voiceless and the other voiced, are articulated in the pre-palatal position with the blade of the tongue. The voiceless affricate occurs only in the speech of the urban population. Elsewhere short voiceless affricate segments are replaced by a voiceless groove fricative, i.e. by [s], and long voiceless affricate segments by [ts]. In some areas, e.g. on the island of Samosir, the voiced affricate is pronounced [z].

Nasals occur at three points of articulation: bilabial, alveolar, and velar. They are voiced in all environments. Of the liquids, /l/ is an alveolar lateral and /r/ an apical trill or flap. They are both voiceless utterance-finally and voiced elsewhere. In some areas /r/ is pronounced as a uvular trill or voiced velar fricative.¹

The apical groove fricative /s/ is articulated in the alveolar or palato-alveolar region. It is voiceless in all positions.

The semi-vowels occur only short. /w/ is more frequent than /y/; both occur relatively infrequently and only in the speech of the urban population. Other speakers replace them by vowels, e.g. /uálu/ for /wálu/ 'eight', /saraóar/ for /saráwal/ 'trousers', /baóa/ for /báwa/ 'man'. /y/ occurs exclusively in Malay-Indonesian borrowings, /w/ largely so.

Finally, one other case of synchronic variation in the distribution of phonemes must be noted. In the dialect of Toba-Batak described by Van der Tuuk [k] and [h] were in complementary distribution, [h] occurring initially and intervocalically and [k] elsewhere. One might say, therefore, that in the dialect of that period the phoneme /k/ had two allophones [k] and [h]. When we turn to the Toba-Batak spoken by my informants, on the other hand, this statement is no longer valid. As a result of extensive borrowings from Malay-Indonesian [k] now occurs freely in initial and intervocalic position. Clearly [k] and [h] must now be analysed as members of separate phonemes, as has been done in the present study. However, speakers with more conservative habits, especially in rural areas, replace initial [k] in these borrowings by [h], and thus have, for instance, [h0pi] instead of [k0pi] 'coffee'. In idiolects in which this is the case [h] and [k] are still members of the phoneme /k/, and no independent phoneme /h/ exists.

As regards intervocalic [k] in borrowings from other languages the following is the case. Traditionally Toba-Batak speakers have replaced intervocalic [k] by [kk], hence /túkkaN/ 'craftsman' from Malay-Indonesian tukang. As far as I am aware, no tendency to replace /túkkaN/ by /túkaN/ has developed. On the other hand, a few words with intervocalic /k/ do now occur in the speech of my informants, and in these cases I have observed no competing pronunciation with intervocalic /kk/ (e.g. /pakaráNan/ 'yard' from Indonesian pekarangan), but the situation merits further investigation.

Toba-Batak has a seven-vowel system: /i e É a 0 o u/. Vowels are longest utterance-finally in a stressed open syllable, shortest in unstressed closed syllables. A mid central vowel /ə/ occurs in Malay-Indonesian borrowings, e.g. /sutará/ 'silk', /səlátan/ 'south'.

The vowel /a/ has a low central, often markedly pharyngealised allophone (1) when preceded or followed by a voiced consonant and (2) when followed by one of the following vowels: /i e o u/, e.g. /bádan/ 'body' [bʌdʌn], /dálan/ 'way' [dʌlʌn], /bába/ 'mouth' [bʌbʌ], /bágas/ 'house' [bʌgʌs], /bajár/ 'young' [bʌjʌr], /balgá/ 'large' [bʌlgʌ], /jágal/ 'meat' [jʌgʌl], /láda/ 'pepper' [lʌdʌ], /háu/ 'wood' [hʌu], /láut/ 'sea' [lʌut], /batúh0n/ 'to cough' [bʌtúh0n], /harinúan/ 'wasp' [hʌrinúan], /sirábun/ 'ashes' [sirʌbun], /bátu/ 'stone' [bʌtu], /dápit/ 'David' [dʌpit], /dátu/ 'medicine-man' [dʌtu], /máup/ 'to float' [mʌup], /gánup/ 'every' [gʌnup], /páuN/ 'umbrella' [pʌuN], /sáu/ 'anchor' [sʌu], /galé/ 'weak' [gʌlé].

This allophone of /a/ is a noticeable distinguishing feature of Toba-Batak speech. For this reason speakers of the language endeavour, often with limited success, to avoid using this sound when speaking Bahasa Indonesia. As a result of this constant effort bilingual speakers often replace [ʌ] by fronter non-pharyngealised allophones when they are speaking Toba-Batak. In the speech of my informants there is a marked fluctuation in the distribution of the pharyngealised allophone. Thus /ráut/ 'knife' is pronounced [rʌut], /maíla/ 'embarrassed' sometimes [maíla], and at other times [maíla]. One may conclude from the available evidence that, at least in the speech of urbanised Bataks, this allophone of /a/ is in the process of being replaced by fronter allophones.²

The phonemic distinction between the close vowels /e/ and /o/ on the one hand, and the open vowels /E/ and /O/ on the other, is consistently maintained. However, minimal pairs are rare, e.g. /bé/ 'each' /bE/ 'already, any longer', /jólo/ 'front', /jólo/ 'please'. It may be noted that the close vowels do not co-occur with the open vowels in the same morpheme. Thus while the following occur: /begé/ 'hear', /gogó/ 'strong', /hépEN/ 'brass, money', /p0só/ 'young', /bé0/ 'cockatoo', /tóle/ 'Come now!', /lóte/ 'kind of bird', the following would not be permissible: /gog0/, /bEge/, /be0/, /tole/, and so forth. Moreover, the close vowels predominate statistically before a single medial voiced stop, affricate, or before medial /l/, while the open vowels predominate before geminates, single voiceless stops, and before nasals. Examples follow:

/óbuk/ 'hair', /alógo/ 'wind', /appódi/ 'bamboo-rat', /logó/ 'dry', /péle/ 'worship', /déba/ 'some', /begé/ 'hear', /médan/ 'Medan'; /lótiN/ 'fire-lighter', /tóru/ 'underneath', /tópi/ 'edge', /tóna/ 'middle', /lóksa/ 'ten thousand', /silópak/ 'kind of bird', /lóppa/ 'cook', /adón/ 'there is', /éddE/ 'song', /bérEN/ 'see', /béttEN/

'rook (*in chess*)', and so forth. The following are counter-examples: /bernít/ 'distressed', /hÉla/ 'son-in-law', /bóru/ 'daughter', /deNgán/ 'good', and so forth.

This evidence, together with the fact that the traditional orthography did not distinguish between open and close vowels, points to the conclusion that the phonemic distinction between them is of recent date. A comparative study of different local varieties of Toba-Batak and the other Batak languages is likely to throw much light on this interesting problem.³

Examples of different segmental phonemes occurring in a variety of environments follow:

/p/ initially, medially between vowels, medially before and after a consonant, geminated, and finally: /póda/ 'instruction', /dópa/ 'fathom', /ráp/ 'together', /jarúpta/ 'our needles', /Onópsa/ 'all six', /Óppu/ 'grandfather', /sálpu/ 'to elapse'.

/b/ initially, medially between vowels, medially preceded by a consonant, and geminated: /búlu/ 'bamboo', /rábi/ 'knife', /íbbu/ 'kind of monkey', /hólbun/ 'valley, plain'.

/t/ initially, medially between vowels, medially after a consonant, geminated, and finally: /táOn/ 'year', /pítu/ 'seven', /dúhut/ 'grass', /gústin/ 'scissors', /gáttun/ 'to hang'.

/d/ initially, medially between vowels, medially after a consonant, geminated: /dÉkkE/ 'fish', /ládaN/ 'field', /dálda/ 'wasp', /daqdának/ 'child', /húddul/ 'to sit', /sOrdák/ 'closed'.

/c/ initially, medially between vowels, medially after a consonant, geminated: /cÉt/ 'paint', /mÓccí/ 'rat', /hucúbo/ 'tried by me', /parcúma/ 'of no avail'.

/j/ initially, medially between vowels, medially after a consonant, geminated: /júhut/ 'meat', /báju/ 'shirt, jacket', /marjájji/ 'to promise', /sálju/ 'snow'.

/k/ initially, medially before a consonant, geminated, finally: /káttOr/ 'office', /múlak/ 'to return', /nakkiníN/ 'just now', /lóksa/ 'ten thousand'.

/g/ initially, medially between vowels, medially after a consonant, geminated: /guráppaN/ 'crab', /íguN/ 'nose', /márga/ 'lineage', /tONGf/ 'sweet', /balgá/ 'large', /uggógo/ 'stronger'.

/q/ initially, medially between vowels, medially before a consonant, finally: /qípOn/ 'tooth', /búluq/ 'bamboo', /mataqáEk/ 'spring', /mOqmÓk/ 'fat', /páqna/ 'his foot', /daqdának/ 'child'.⁴

/s/ initially, medially between vowels, medially before or after a consonant, finally, geminated: /sóban/ 'firewood', /nása/ 'all', /úrsa/ 'deer', /dóss0n/ 'like', /lóksa/ 'ten thousand', /gústiN/ 'scissors', /marúrus/ 'to fall out'.

/h/ initially, medially after a consonant, medially between vowels: /háil/ 'fish-hook', /g0árhu/ 'my name', /íhur/ 'tail'.

/m/ initially, medially between vowels, medially after a consonant, geminate, finally: /mata/ 'eye', /tamúE/ 'guest', /pósma/ 'a boy's name', /húrum/ 'cheek', /úmna/ 'kiss'.

/n/ initially, medially between vowels, medially after a consonant, finally, geminated: /napúran/ 'betel', /nínna/ 'he said', /alúsna/ 'his answer', /gúna/ 'use'.

/N/ initially, medially between vowels, medially before and after a consonant, geminated, finally: /NErNÉr/ 'slow', /j0Nj0N/ 'to stand', /búNa/ 'flower', /arimfngu/ 'Sunday', /mísaN/ 'viverra', /b0rNin/ 'night', /núNna/ 'already', /uNNáli/ 'colder'.

/l/ initially, medially between vowels, medially before or after a consonant, geminated, finally: /lflu/ 'to lose one's way', /sálpu/ 'to elapse', /tállus/ 'to slip', /pfNg0l/ 'ear', /mallitìNlitíN/ 'to make a clinking noise'.

/r/ initially, medially between vowels, medially before or after a consonant, geminated, finally: /rúpa/ 'appearance', /jàrijári/ 'finger', /sórha/ 'spinning-wheel', /b0rNin/ 'night', /bíbir/ 'lip', /marrára/ 'to be red', /pabrík/ 'factory'.

/y/ medially between vowels: /áyat/ 'verse'.

/w/ initially and medially between vowels: /wálu/ 'eight', /báwa/ 'man'.

/i/ initially, medially between consonants and vowels, finally: /ínaN/ 'mother', /díla/ 'tongue', /bábi/ 'pig', /babíat/ 'tiger', /sái/ 'continually'.

/e/ medially between consonants and vowels, finally: /médan/ 'Medan', /parbúe/ 'fruit', /deNgán/ 'good', /leléN/ 'long', /pelé0n/ 'to be worshiped'.

/E/ initially, medially between consonants and vowels, finally: /ÉddE/ 'song', /rÉrE/ 'carpet', /buÉa/ 'crocodile', /áEk/ 'water'.

/a/ initially, medially between consonants and vowels, finally: /àlEáIE/ 'friend', /más/ 'gold', /paÉt/ 'bitter', /nápu/ 'manure', /balgá/ 'large'.

/o/ initially, medially between consonants and vowels, finally:
 /dóNan/ 'companion', /bÉO/ 'parrot', /gÓar/ 'name', /Óbbun/ 'cloud',
 /marbábO/ 'to weed'.

/o/ initially, medially between consonants and vowels, finally:
 /módom/ 'to sleep', /daÓ/ 'far', /mabbóan/ 'to take', /Óbuk/ 'hair'.

/u/ initially, medially between consonants and vowels, finally:
 /úhum/ 'law', /múlak/ 'to return', /dúa/ 'two', /ráut/ 'knife',
 /péut/ 'to fall', /parbúe/ 'fruit', /túr/ 'dry land'.

/ə/ medially between consonants: /sutará/ 'silk', /səlátan/ 'south'.

2. SYLLABLES

In a sequence consisting of two vowels with an intervening consonant the consonant belongs in the same syllable as the second vowel. A syllable boundary occurs between two adjacent consonants and between two adjacent vowels.

Examples of syllable divisions: /lÓ-bi/ 'more', /sÓd-duk/ 'spoon',
 /bu-É-a/ 'crocodile', /ma-ra-ú-aN/ 'to bark'.

There are four types of syllables: those consisting of a vowel, e.g. /í/ 'the', those consisting of a vowel preceded by a consonant, e.g. /ni/ 'of', those consisting of a vowel followed by a consonant, e.g. /ón/ 'this', and those consisting of a vowel preceded and followed by a consonant, e.g. /más/ 'gold'. The first two types are open syllables, the last two closed syllables. A closed syllable is never followed by a syllable beginning with a vowel.

The following are examples of syllable sequences: /hÓr-bo/ 'buffalo' (closed syllable followed by open), /tó-lu/ 'three' (open syllable followed by a second open syllable), /bá-En/ 'do!' (open syllable followed by closed).⁵

3. STRESS

It is convenient to distinguish three degrees of stress: primary (indicated by an acute accent over the vowel), secondary (indicated by a grave accent over the vowel), and tertiary (unmarked). Primary stress is the most prominent stress in an utterance; secondary stress is the degree of stress which occurs on all other strongly stressed syllables; all other syllables have tertiary stress.⁶

The rules of stress placement are given in Chapter III, section C7.

- /bb/ : /sábbil/ 'arrow', /dìnub bfaN/ 'drunk by a dog'
 /br/ : /pabrík/ 'factory'
 /cc/ : /mócci/ 'rat'
 /dd/ : /addúhur/ 'pigeon', /ód d0/ 'It is this one'
 /gg/ : /uggógo/ 'stronger'
 /jj/ : /gijjáN/ 'high', /harbàNajjúlu/ 'front entrance', /tarúh0j j0/ 'Please bring it!'
 /kk/ : /tákki/ 'bark-cloth', /d0Nákkul/ 'my companion', /dàk kalús/ 'not refined'
 /kp/ : /nákpE/ 'although', /dàk p0s0/ 'not young'
 /ks/ : /lókxa/ 'ten thousand', /dàk sumán/ 'not appropriate'
 /kt/ : /t0kt0N/ 'always', /dàk tutú/ 'not true'
 /lb/ : /hólbun/ 'valley, plain', /dipúkkul bìaN/ 'a dog was beaten'
 /ld/ : /dáldal/ 'wasp', /dipúkkul d0/ 'it was beaten'
 /lg/ : /balgá/ 'large', /dipúkkul guru/ 'beaten by the teacher'
 /lh/ : /t0lhas/ 'to go into effect', /piNg0lhu/ 'my ear', /dipúkkul h0/ 'was beaten by you'
 /lj/ : /sálju/ 'snow', /púkkul j0/ 'Please beat!'
 /ll/ : /maNállaN/ 'to eat', /sàl lÉbbar/ 'one page'
 /lm/ : /j0lma/ 'human being', /húddul ma/ '(he) sat'
 /ln/ : /piNg0lna/ 'his ear', /dipúkkul nasída/ 'beaten by them'
 /lp/ : /sálpu/ 'to elapse', /púkkul píga/ 'What time is it?'
 /lr/ : /dipúkkul rája/ 'beaten by a rajah'
 /ls/ : /s0ls0l/ 'remorse', /dipúkkul si ápul/ 'beaten by Apul'
 /lt/ : /últop/ 'blow-gun', /mamultúli/ 'to cut off', /púkkul tólu/ 'three o'clock'
 /md/ : /làmdip0s/ 'tigher'
 /mg/ : /làmgogó/ 'stronger'
 /ml/ : /lomlóm/ 'dark', /làmlabbát/ 'slower'
 /mm/ : /úmma/ 'kiss', /làmmurá/ 'easier'
 /mn/ : /jarúmna/ 'his needle', /làmnipís/ 'thinner'
 /mr/ : /làmmom0s/ 'having more fruit'

- /nn/ : /unnÉaN/ 'lighter', /taNáanna/ 'his hand', /iNànan násiN/ 'another place'
- /Nb/ : /bàliNbálin/ 'windmill', /tùN b0rátt/ 'rather heavy'
- /Nd/ : /díNdiN/ 'wall', /makkúlin d0/ 'spoke'
- /Ng/ : /táNga/ 'ladder', /tùN gogó/ 'rather strong'
- /Nj/ : /jÓNJON/ 'to stand', /tùN jinák/ 'rather tame'
- /Nl/ : /tùN logó/ 'rather dry'
- /Nm/ : /ináNmu/ 'your mother', /tùN malÓ/ 'rather clever'
- /Nn/ : /ináNna/ 'his mother', /sa lèleN ni leléNna/ 'for ever'
- /NN/ : /núNna/ 'already', /uNNáli/ 'colder'
- /Nr/ : /NErNÉr/ 'slow', /tùN rejét/ 'rather shallow'
- /pp/ : /góppul/ 'bear', /sìap píttu/ 'from the door'
- /ps/ : /0nÓpsa/ 'all six', /òN0p sápu/ 'six brooms'
- /pt/ : /jarúpta/ 'our needles', /òN0p túbu/ 'six children'
- /qb/ : /mùlaq botí/ 'to return empty-handed'
- /qc/ : /hàlaq cína/ 'Chinese'
- /qd/ : /daqdának/ 'child', /mEqmÉq d0/ 'It is small'
- /qg/ : /aEqgódan/ 'river'
- /qj/ : /jumúqjut/ 'more often', /sìpaq jábu/ 'as high as a house'
- /qk/ : /p0jòq kamar í/ 'the room is crowded'
- /ql/ : /láqlak/ 'skin'
- /qm/ : /mEqmÉt/ 'small', /sogòq manógot/ 'early in the morning'
- /qn/ : /páqna/ 'his foot', /másuq nasìda/ 'they went in'
- /qp/ : /hàlaq paNiNáni/ 'inhabitant'
- /qr/ : /disàkkaq r0hána/ 'he decided'
- /qs/ : /sàkkaqsákkap/ 'desire', /òpaq sólu/ 'four canoes'
- /qt/ : /martúqtup/ 'to decide', /mùlaq tu jábu/ 'to return home'
- /rb/ : /d0rbífa/ 'domestic animal', /marbágas/ 'to get married'
- /rc/ : /parcúma/ 'to no avail'
- /rd/ : /s0rdák/ 'locked', /rápar do/ 'is hungry'
- /rg/ : /gÓrga/ 'carving', /margulása/ 'to wallow'

/rh/	: /sÓrha/ 'spinning-wheel', /ijúru/ 'my spittle'
/rj/	: /hÓrja/ 'feast', /parjólo/ 'first'
/rk/	: /tÓrkís/ 'healthy', /rúar kapála/ 'by heart'
/rl/	: /pÓrlú/ 'necessary', /tarlóNaN/ 'astonished', /manigòr lója/ 'immediately tired'
/rm/	: /dÓrma/ 'magic concoction', /manigòr mabóla/ 'immediately broke'
/rn/	: /marníaN/ 'to be slim', /hÓrnÓp/ 'flat'
/rN/	: /NErNÉr/ 'slow', /marNiNíN/ 'to buzz'
/rp/	: /dÓrpi/ 'wall', /marpíkkir/ 'to think'
/rr/	: /marrára/ 'to be red'
/rs/	: /mársak/ 'to be sad', /marsiájar/ 'to study'
/rt/	: /manÓrtOr/ 'to dance', /martabúni/ 'to hide'
/sb/	: /alpís butuhána/ 'her stomach was shrunken'
/sd/	: /halús dO/ 'it is fine'
/sj/	: /gádis jOlo/ 'Please sell!'
/sk/	: /páska/ 'Easter'
/sm/	: /alúsmu/ 'your answer', /digádis ma/ 'was sold'
/sn/	: /alúsna/ 'his answer', /digàdis nasída/ 'was sold by them'
/sp/	: /mamáspas/ 'to beat', /haròtas panurátan/ 'writing paper'
/ss/	: /hipàssipás/ 'healthy', /parahissú/ 'too steep', /digàdis sÓ/ 'sold by you'
/st/	: /bistÓk/ 'clever', /alústa/ 'our answer'
/ts/	: /tolútsa/ 'all three'
/tt/	: /attÓN/ 'in fact', /mabbùaq tùNganEbóru/ 'to take a wife'

In the second diagram all sequences of two vowels are tabulated. The same conventions obtain as for the first diagram. Examples follow the diagram.

	i	e	E	a	0	o	u
i				x	x	x	x
e				x	x		x
E	x			x	x		
a	x		x		x	x	x
0	x			x			
o	x			x	x		
u	x	x	x	x			

/ia/ : /iás/ 'clean'

/i0/ : /kadí0/ 'pawn (in chess)'

/io/ : /tió/ 'clear'

/iu/ : /tiúr/ 'light'

/ea/ : /parbinegéan/ 'hearing'

/e0/ : /begé0n/ 'to be heard'

/eu/ : /péut/ 'to fall'

/Ei/ : /marEddÉi/ 'to sing continually'

/Ea/ : /maNalÉan/ 'to give'

/E0/ : /bÉ0/ 'parrot'

/ai/ : /háil/ 'fish-hook'

/aE/ : /áEk/ 'water'

/ao/ : /daó/ 'far'

/au/ : /ráut/ 'knife'

/oi/ : /maddóit/ 'to sting'

/oa/ : /mabbóan/ 'to bring'

/0i/ : /babói/ 'to weed'

/0a/ : /r0á/ 'bad'

/o0/ : /cubbó0n/ 'to be begun'

/ui/ : /huída/ 'seen by me'

/ue/ : /parbúe/ 'fruit'

/uE/ : /tamúE/ 'guest'

/ua/ : /dúa/ 'two'

Sequences of three vowels are rare. The following have been observed:

- /iEa/ : /diEáhi/ 'was chased'
 /Eai/ : /maNaIEáí/ 'to slander'
 /aia/ : /naiápul/ 'mother of Apul'
 /a0a/ : /ba0á/ 'man'
 /aua/ : /maraúaN/ 'to bark'
 /ou0/ : /joú0n/ 'to be called'
 /uEa/ : /buÉa/ 'crocodile'
 /uaE/ : /nuáEN/ 'now'
 /ua0/ : /parhuá0n/ 'manner of relationship'

Across word boundaries longer sequences of vowels occur, e.g.
 /ba0a í/ 'the man', /buÉa 0n/ 'this crocodile', /r0á au/ 'I am ugly'.

6. SAMPLE PHONEMIC TRANSCRIPTION

Utterances are numbered and pauses indicated by a plus sign. Word boundaries are indicated, wherever possible, by spaces, but they have no phonemic significance.

1. /dina sadáriq + marbàda d0 alògo d0h0q mataniári + tarìN0q tu hagogonasídaq/
2. /jàla di tikkíq + mamòlus d0 sa hàlaq pardálan = na mamàkkE bajujásnaq/
3. /mardosnir0ha d0 nasìda + na manaN ìsE na boi mabbáEn + si pardàlan ì manàNgal bàjujasna í + na í ma na gumògoq/
4. /di tikkíq + maNùllus m alogo ì maccai gogóq/
5. /qalái + lam digògo maN0bbus + lam takkàs d0 dialìtt0p pardàlan ì bàjujasna íq/
6. /qùjuNu júNnaq + macc0h0q d0 ibàna maccúboq/
7. /duNí + mulài ma mataniarì marsin0ddaN + jàla tuN maccai lás d0q/
8. /manig0r d0 att0N dibùkka pardàlan ì bàjujasnaíq + jala maN0kku d0 alogo íq + na gumògo mataniarì sian ibánaq/

English Translation

1. 'One day the wind and the sun were arguing about their strength'
2. 'And then a traveller passed by dressed in a coat'

3. *'They agreed that whichever of them could cause the traveller to undo his coat would be the stronger'*
4. *'Then the wind blew very hard'*
5. *'But the stronger he blew, the tighter the traveller wrapped his coat around him'*
6. *'Finally he stopped trying'*
7. *'Then the sun began to shine and it was quite hot'*
8. *'Immediately the traveller opened his coat, and the wind admitted that the sun was stronger than he'*

N O T E S

1. Nababan (1958:19) identifies this area as 'the mountain district of Humbang'. Under the entry *harop*, Warneck (1906:87, Warneck-Winkler 1977:108) offers the following observation: 'Die Batak, welche zwischen Baros und Silindung wohnen, sprechen das r hinten in der Kehle'. See Van der Tuuk 1861:74, and 1864-67, paragraph 7, note 6.
2. Van der Tuuk (1864-67, paragraph 4) notes two phonetic shades of *a*, one reminiscent, he claims, of the *o* in French *école*, which occurs in unaccented final syllables before *n* and *m* (he cites *lejan* 'to give'), the other similar to the Dutch *a* in closed syllables, occurring elsewhere. Meerwaldt (1904:3) mentions a variety of *a*, which he transcribes *ae*, occurring after *b* in the speech of women and children, and cites *baetu* 'stone' and *baebi* 'pig'. This is clearly the [ʌ] of my informants. Compare also Marcks 1912:7.
3. Van der Tuuk (1864-67, paragraphs 5-6) distinguishes open and close varieties of *e* and *o*, but the pronunciation rules he offers do not apply to the dialect of Toba-Batak spoken by my informants. For instance, he cites /malé/ 'hungry', /bére/ 'nephew, niece', /tóru/ 'underneath', /góra/ 'shout', /borát/ 'heavy', while my informants have /malÉ/, /bÉrE/, /tóru/, /góra/, and /b0ráť/. Nababan's account of the distribution of close and open vowels agrees exactly with the speech of my informants.
4. Nababan argues (1958:22-26, and 1966:7) that glottal stop is an allophone of /k/. But [q] is not phonetically more similar to [k], than it is to [t], or [p]. Moreover, [q] and [k] both occur before [k], e.g. [sùraqkábar] 'newspaper' : [tùkkakkóbun] 'gardener'. If one adopts the approach of classical phonemics, as is done in the present

study, it is impossible to refuse phonemic status to glottal stop. That this solution appears to violate the *Sprachgefühl* of a native speaker is an interesting fact with possible theoretical implications, but it can hardly be considered a valid argument in favour of relaxing the principles of phonemic analysis in this one instance.

5. Nababan (1966:8f) reports that some speakers have a syllable type in which a vowel is preceded by a geminate stop, e.g. /ddáN/ 'not', /ddí/ 'that one', /ddiŋ/ 'this one', /ddián/ 'that one', /ddadú/ 'that one'. My informants have single syllable-initial stops in these forms, and no such syllable type occurs in their speech.

6. Nababan (1958:50-56, cf. his 1966:6-8) posits four levels of stress by splitting up secondary stress into a heavier and a weaker variety. The heavier kind occurs on the noun in a noun-adjective construction, e.g. /hálaq na búrju/ 'an honest person', and on the imperative verb in a sequence consisting of an imperative and a subject noun phrase when the latter has emphatic stress, e.g. /ákkaq lóbbaN/ 'Jump across the gorge!', /állaN iddáhan/ 'Eat rice!'. The weaker variety supposedly occurs on the first of the two members of a compound noun, e.g. /háta báta/ 'the Batak language', and on the subject of an imperative verb when no emphasis is placed on it, e.g. /ákkaq lòbbaN/ 'Jump across the gorge!'. Nababan further asserts that the two varieties contrast minimally in /àNin na úli/ 'good air' (noun-adjective sequence), as against /àNin na úli/ 'Anginnauli (place name)'. I have heard no such consistent difference of stress in the types of sentences and phrases which Nababan quotes.

CHAPTER III
MORPHOPHONEMICS

A. INTRODUCTION

This chapter is concerned with the phonemic representation of morphemes. The first part, entitled Automatic Morphophonemics, deals with morphophonemic alternations which, but for a small number of exceptions, can be described entirely in terms of phonemes and phonemic environments. The second part, entitled Non-automatic Morphophonemics, deals with morphophonemic alternations which can be described only by mentioning the identity of the morphemes involved. The third part, entitled Morpheme Structure, deals with typical morphophonemic shapes of morphemes.

A reader unfamiliar with the terms morpheme, morph, and allomorph should consult Charles F. Hockett's article 'Problems of Morphemic Analysis' (Hockett 1947). It is convenient to extend Hockett's terminology to accommodate certain phenomena which would otherwise be difficult to describe. Thus certain morphemes in Toba-Batak are represented by a string of two identical phoneme sequences, e.g. /àlɛáɛ/ 'friend'. The peculiarity of such morphemes is that the two phonemes on either side of the boundary between the two sequences participate in the same system of regular alternations which characterise phonemes occurring across a morph boundary. For instance, /ùtohútok/ 'brain' can be regarded as a single repetition of the same morphophonemic sequence provided the /h/ can be explained as resulting from k by the application of the regular morphophonemic rule which replaces k by /h/ before an immediately following morph-initial vowel. (Compare /hálak/ 'person' and /hàlah án/ 'that person'.)

It seems reasonable to conclude, therefore, that such a phonemic string as /ùtohútok/ represents a single morpheme but consists of a

string of two identical morphophonemic sequences. In this way there is no longer a one-to-one relation between morphemes and the morphophonemic sequences subject to automatic morphophonemic rules. That is to say, morphophonemic sequences must be regarded as a level of representation intermediate between morphemes and phoneme sequences.

Moreover, certain morphemes have more than one morphophonemic sequence associated with them. For example, the morpheme meaning '*village*' is represented by the two morphophonemic sequences *huta* and *hutan*. The allomorph /*huták*/ which occurs in the form /*huták-ku*/ '*my village*' results from the second of these sequences by the application of regular morphophonemic rules. The two sequences *húta* and *hútan* will be termed basic allomorphs of the morpheme meaning '*village*'. Basic allomorphs are subject to morphophonemic rules yielding allomorphs. (See further in section B1 of this chapter.)

In addition, a small group of morphemes occurring in complex nouns have a still more distant relation to phonemic shapes. More specifically, a certain set of affixes is distributed as representatives of this set of morphemes in such a way that the relation between the two sets is many-many. Thus the morpheme meaning '*action*' is represented by six affixes: *paN-*, *par-*, *ha-*, *paN-...-an*, *par-...-an*, and *paN-...-on*. However, the first of these affixes is shared by the morphemes meaning '*instrument*' and '*location*'. Furthermore, the affix *paN-* has four basic allomorphs *paN-*, *paNa-*, *pan-*, and *pa-*. One of these, *pan-*, is in turn represented by six phonemic shapes in different environments, namely /*pad paN pab pak paj pac*/. (See further in Chapter IV, section 2 (3).) In these instances, therefore, four levels of analysis must be distinguished: morphemes, affixes, basic allomorphs, and allomorphs (phonemic shapes).

The linguistic model used in describing the automatic morphophonemics is what Hockett called 'item and process' in his article 'Two Models of Grammatical Description' (Hockett 1954).

B. AUTOMATIC MORPHOPHONEMICS

1. REPLACEMENT RULES

When the phonetic transition between two morphs occurring in sequence is close the two phonemes on either side of the morph boundary participate in a system of regular alternations.

Thus in the utterance /*siak kamú*/ '*from you*' the last phoneme of the first morph alternates with /*s*/ in /*sias sóp0 i*/ '*from the rice-barn*', with /*p*/ in /*siap púdi*/ '*from behind*', with /*b*/ in /*siab bìaN í*/ '*from the dog*', with /*n*/ in /*sian nasída*/ '*from them*', with /*m*/ in /*siam*

médan/ 'from Medan', with /t/ in /siat taNákkú/ 'from my hand', with /j/ in /siaj jábu/ 'from home', and so forth. In a similar way the initial phoneme of the second morph /kamú/ 'you' alternates with /p/ in /módop pamù/ 'you were asleep', with /t/ in /dòhòt tamú/ 'with you', with /s/ in /digàdis samú/ 'sold by you', with /h/ in /ditùhòr hamú/ 'bought by you'.

These alternations are described here by setting up for each morpheme one, and in some cases more than one, basic allomorph. Basic allomorphs are represented in morphophonemic transcription. The inventory of morphophonemic symbols is the same as the inventory of phonemic symbols except that it lacks the symbol q. A morphophoneme is the theoretical entity designated by a morphophonemic symbol. Citations in morphophonemic transcription are italicised.

Morphophonemes are related to phonemes by replacement rules. The following is an example of a replacement rule: 'nh is replaced by /kk/'. This means that wherever a morphophonemic transcription contains the sequence nh, the corresponding phonemic transcription contains the sequence /kk/. For instance, the morphophonemic representation sian hamú 'from you' can be converted into its corresponding phonemic transcription by applying this rule, yielding the representation /siak kamú/. When a replacement results in phonemic symbols which have the same shape as the morphophonemic symbols, the morphophonemic sequence will be said to remain unchanged.

Replacement rules are described here by means of the matrix which follows. The rows represent first members of a sequence of two morphophonemic symbols, and the columns second members. The symbols at the intersection of a row and a column represent the phoneme sequence resulting from the replacement of those two morphophonemic symbols. v represents any vowel. To read off the replacement for, say nh, follow the row which has n at the extreme left until the column under h is reached, at which point the sequence /kk/ will be found.

	p	t	k	b	d	g	s	c	j	m	n	N	l	r	h	V
p		qt			qd		qs		qj	qm			ql	qr	pp	pV
t	qp	qt	qk	qb	qd		qs		qj	qm	qn			qr	tt	tV
k	qp	qt		qb	qd	qg	qs	qc	qj	qm	qn		ql	qr	kk	hV
s	sp	st	sk	sb	sd		ss		sj	sm	sn			sr	ss	sV
m	pp	pt	pk	bb	md	mg	ps			mm	mn		ml		pp	mV
n	pp	tt	kk	bb	dd	Ng	ts	cc	jj	mm	nn		ll	rr	kk	nV
N	kp	kt	kk	Nb	Nd	Ng	ks		Nj	Nm	Nn		Nl	Nr	kk	NV
l	lp	lt		lb	ld		ls		lj	lm	ln			lr	lh	lV
r	rp	rt	rk	rb	rd	rg	rs	rc	rj	rm	rn	rN	ll	rr	rh	rV

These replacement rules may be summarised in the following statements:

1. A voiceless stop is replaced by /q/ before stops, affricates, fricatives, nasals and liquids.
2. n first assimilates its point of articulation to a following stop, then assimilates completely to it. Thus nb changes first to mb, and then to /bb/. Before g only the first step takes place, i.e. ng becomes /Ng/.
3. m is replaced by /p/ before voiceless stops, assimilates completely to b, and remains unchanged before d and g.
4. N is replaced by /k/ before voiceless stops, and remains unchanged before voiced stops.
5. Before s a nasal is replaced by the homorganic voiceless stop.
6. The nasal in a nasal plus h sequence is treated like the homorganic voiceless stop and then statement 8 applies.
7. n and r assimilate completely to a following l, and n to a following m.
8. h completely assimilates to a preceding voiceless stop or s.
9. k is replaced by /h/ before a vowel.

Certain of these statements require further comment.¹

1. In a number of instances at morph boundaries within words nh is replaced by /tt/. For example, íp0n 'tooth' + hu 'my' yields /ípóttu/, and hudónhu 'my pot' yields /hudóttu/. In some cases informants offer two forms, e.g. /daláttu/ and /dalákku/ 'my way' for morphophonemic dalán-hu, and /máNat tamù/ and /máNak kamù/ 'you eat' for morphophonemic

máNan hamù. One informant offered /padeNgakkú/ 'too good' for morphophonemic padeNghanú, while another offered /padeNgattú/ and rejected the other pronunciation. For more examples of /tt/ from nh see section 2 below.

2. At morph boundaries within words ns is replaced sometimes by /ts/, and sometimes by /cc/. Thus both /tolúcca/ and /tolútsa/ from tolún-sa 'all three' occur. According to my informants /tolucca/ is not heard in the countryside. At morph boundaries between words ns is replaced by /ts/ or by /ss/, e.g. /tágat s0/ and /tágas s0/ from tagan s0 'before (conjunction)'. For more examples see section 2 below.

3. The m of the prefix um- becomes k before h, and the h assimilates completely to it, e.g. /ukkólom/ from umhólom 'darker'. Before all other consonants this m assimilates completely, e.g. /uddéNgan/ from umdéNgan 'better', /uggógo/ from umgógo 'stronger', /ullógo/ from umlógo 'drier', /unnéaN/ from umnéaN 'thinner', /uNNÉrNer/ from umNÉrNer 'slower', /urrára/ from umrára 'redder', and /ussómal/ from umsómal 'more usual'.

4. At word-internal morph boundaries voiceless stops sometimes assimilate completely to a following voiceless stop instead of being replaced by /q/. This is common in morphemes represented by a sequence of two identical morphs, e.g. /martúttup/ from martúptup 'to decide', /ditáttap/ from ditáptap 'washed'.²

2. EXAMPLES OF REPLACEMENT RULES

In all the examples in this section the formula on the left is of the form wx -- yz, and it should be interpreted as follows: to a sequence in a morphophonemic transcription consisting of the morphophonemes wx there corresponds in the phonemic transcription of the same linguistic form a phonemic sequence yz. This is followed by one, or in some cases by two, examples in phonemic transcription. Each example is followed by an English gloss and the same form in morphophonemic transcription. Where two examples are cited, the first is an instance of the morphophonemic sequence occurring within a word, and the second an instance of the same morphophonemic sequence occurring across a word boundary.

pt -- qt /martuqtup/ 'to decide' martúptup, /ràq táNis/ 'weep together' ràp táNis.

pd -- qd /dàqdap/ 'shadow-tree' dápdap, /sóluq dahàn0n/ 'a measure of rice' sólup dahàn0n.

- ps -- qs /sàkkaqsàkkaq ni rÓha/ 'desire' sàkkapsàkkap ni rÓha.
- pj -- qj /gànuq jábu/ 'every house' gànup jábu.
- pm -- qm /hatÓq ma/ 'straightway' hatÓp ma.
- pl -- ql /raq lá0/ 'go together' rap lá0.
- pr -- qr /disàkkaq r0hána/ 'he desired' disàkkap r0hána.
- ph -- pp /marísap pìta/ 'Let us smoke' marísap hìta.
- tk -- qk /p0jÓq kamar ì/ 'This room is crowded' p0jÓt kamar ì.
- tb -- qb /mabbùaq bóru/ 'to marry (said of a man)' manbùat bóru.
- td -- qd /mEqmÉq d0/ 'It is small' mEtmÉt d0.
- ts -- qs /d0h0q si mÉna/ 'and Mena' d0h0t si mÉna.
- tj -- qj /jumúqjut/ 'more often' jumútjut, /sipaq jábu/ 'as big as a house' sipat jábu.
- tm -- qm /mEqmÉt/ 'small' mEtmÉt, /tarsÓNg0q ma/ 'takes fright' tarsÓNg0t ma.
- tn -- qn /sàhiqna í/ 'her illness' sàhitna í, /pitÒl0q na gájjaN/ 'a long pencil' pitÒl0t na gájjaN.
- tr -- qr /haccìq rukúkku/ 'My neck is stiff' haccìt rukúNhu.
- th -- tt /pamEqmEttú/ 'to small' pamEtmEthú, /dáp0t tò/ 'you are caught' dáp0t hò.
- kp -- qp /tòbbaq parbegúan/ 'the forest where the spirits live' tòbbak parbegúan.
- kt -- qt /didÓq tu au/ 'He told me' didÓk tu au.
- kb -- qb /bùkkuqbùkkuqna í/ 'her hump' bùkkukbùkkuk na í, /mùlaq botí/ 'to be unsuccessful' mùlak botí.
- kd -- qd /madéqdek/ 'to fall' medékdek, /jumÉppEq d0/ 'It is shorter' jumÉppEk d0.
- kg -- qg /dòppaq gíjjaN/ 'upwards' dòppak gíjjaN.
- ks -- qs /dòppaq siámun/ 'to the right' dòppak siámun.
- kc -- qc /hàlaq cína/ 'a Chinese' hàlak cína.
- kj -- qj /dÓq j0/ 'Say it!' dÓk j0.
- km -- qm /m0qmÓk/ 'fat' m0kmÓk, /na lÓs0q ma h0/ 'How lazy you are!' na lÓs0k ma h0.
- kn -- qn /jináqna/ 'its tameness' jinákna.

- kl -- ql /ditàdduq lóbbu/ 'thrown by a bull' ditàdduk lóbbu.
- kr -- qr /babòlaq rErE í/ 'Roll the mat out!' pabòlak rErE í.
- kh -- kk /pajEppEkkú/ 'too short' pajEppEkhú, /náEk k0/ 'Climb!' náEk h0.
- kV -- hV /buknúh0n/ 'hunchbacked' bukkúk0n, /hàlah Ón/ 'this person' hàlak Ón.
- sp -- sp /sibòlis paNág0/ 'Satan the destroyer' sibòlis paNág0.
- st -- st /dipòs tutúp/ 'tight shut' dipòs tutúp.
- sb -- sb /alpís butuhàna/ 'her stomach is shrunken' alpís butuhàna.
- sd -- sd /halús d0/ 'It is fine' halús d0.
- ss -- ss /targadíssa/ 'can be sold' targadíssa, /digàdis si pósma/ 'was sold by Posma' digàdis si pósma.
- sh -- ss /parahissú/ 'too steep' parahishú, /pogós sìta/ 'we are poor' pogós hìta.
- mp -- pp /uppír/ 'harder' umpír.
- mt -- pt /jarúpta/ 'our needles' jarúmta.
- mk -- pk /maNìnum kÓpi/ 'to drink coffee' maNìnum kÓpi.
- mb -- bb /dìnum bían/ 'drunk by a dog' dìnum bían.
- md -- md /là dipós/ 'the tighter' là dipós.
- mg -- mg /là gogó/ 'the stronger' là gogó.
- ms -- ps /0nÓpsa/ 'all six' 0nÓmsa.
- mn -- mn /jarúmna/ 'her needle' jarúmna, /módom nasìda/ 'they slept' módom nasìda.
- ml -- ml /nadidàlamláut/ 'foetus' nadidàlamláut.
- mh -- pp /paholoppú/ 'too dark' paholomhú, /òn0p pálak/ 'six people' òn0m hálak.
- np -- pp /dipapputíkk0n/ 'picked in large numbers' dipanputíkh0n, /siap púdi/ 'from behind' sian púdi.
- nt -- tt /siat taNakku/ 'from my hand' sian taNánu.
- nb -- bb /mabbáEn/ 'to do' manbáEn, /tubùab bóru/ 'to give birth to a daughter' tubùan bóru.
- nd -- dd /madd0Náni/ 'to accompany' mand0Náni, /sumád d0/ 'It is similar' sumán d0.

- ng -- Ng /maNgurúh0n/ 'to learn' mangurúh0n, /sòN0N gottína/ 'in exchange' s0N0N gottína.
- nc -- cc /maccúbo/ 'to try' mancúbo.
- nj -- jj /harbàNaj júlu/ 'front entrance' harbàNan júlu.
- nm -- mm /pukkulómmu/ 'to be beaten by you' 'pukkulónmu, /siam más/ 'of gold' sian más.
- nn -- nn /ipónna/ 'his tooth', ipónna, /iNànan násiN/ 'another place' iNànan na ásiN.
- nl -- ll /làNallaNán/ 'pale' làNanlaNán.
- nr -- rr /di bagàsar r0hána/ 'to himself' di bagàsan r0hána.
- nh -- kk /si boanókku/ 'to be carried by me' si boanónhu, /siak kuría/ 'from church' sian huría.
- Np -- kp /pàlikpáliN/ 'at most' pàliNpáliN, /dak pardúli 'of no concern' daN pardúli.
- Nt -- kt /dàk tutú/ 'not true' dàN tutú.
- Nk -- kk /tùkkak kóbun/ 'gardener' tùkkaN kóbun.
- Nb -- Nb /hùraN báлга/ 'not big enough' hùraN báлга.
- Nd -- Nd /dàn dimanaNdía/ 'nowhere' dàn dimanaNdía, /adòN dONákku/ 'I have a friend' adòN dONánhu.
- Ng -- Ng /maNgádis/ 'to sell' maNgádis, /nàEN guruh0nókku/ 'I want to learn' nàEN guruh0nóhnu.
- Ns -- ks /duk sàlpu í/ 'after that' duN sàlpu í.
- Nj -- Nj /tùkkaN jáit/ 'tailor' tùkkaN jáit.
- Nm -- Nm /dàn múruk/ 'not angry' dàn múruk.
- Nn -- Nn /inàNna/ 'his mother' ináNna, /dàn nipís/ 'not thin' dàn nipís.
- Nl -- Nl /ùnaN lóas/ 'do not let' ùnaN lóas.
- Nr -- Nr /dàn rará/ 'not red' dàn rará.
- Nh -- kk /pat0rákk0n/ 'to make clear' pat0ráNh0n, /dàk káru/ 'not really' dàn háru.
- lp -- lp /pùkkul píga/ 'What time is it?' pùkkul píga.
- lt -- lt /t0lt0l/ 'stiff' t0lt0l, /sap pòNg0l táli/ 'a piece of string' san pòNg0l táli.
- lb -- lb /mamùkkul bíaN/ 'to beat a dog' mamùkkul bíaN.
- ld -- ld /na nÉNEl d0 hò/ 'You are deaf' na nÉNEl d0 hò.

- ls -- ls /ùnak púkkul si ucc0h ì/ 'Don't beat your little brother'
ùnaN púkkul si ucc0k í.
- lj -- lj /ápil j0l0 òn/ 'Learn it!' ápil j0l0 òn.
- lm -- lm /ápil ma òn/ 'Learn it!' ápil ma òn.
- ln -- ln /dipùkkul nasída/ 'beaten by them' dipùkkul nasída.
- lr -- lr /tarsúNgul r0hàkku/ 'my spirit awoke' tarsúNgul r0hànhu.
- lh -- lh /piNgÓlhu/ 'my ear' piNgÓlhu, /mamùkkul háu/ 'to beat a tree'
mamùkkul háu.
- rp -- rp /marpúkkul/ 'to play at marbles' marpúkkul.
- rt -- rt /tartá0n/ 'tolerable' tartá0n, /àttar tabó/ 'quite tasty'
àttar tabó.
- rk -- rk /lùar kapála/ 'by heart' lùar kapála.
- rb -- rb /marbadái/ 'to quarrel' marbadái, /j0jÓr bàEn/ 'Put them in
order!' j0jÓr bàEn.
- rd -- rd /mardálan/ 'to walk' mardálan, /àttar deNgán/ 'quite good'
àttar deNgán.
- rg -- rg /margúli/ 'to play at marbles' margúli.
- rs -- rs /marsógot/ 'tomorrow' marsógot.
- rc -- rc /parcúma/ 'to no avail' parcúma.
- rj -- rj /marjájji/ 'to promise' marjájji, /ukk0r j0/ 'dive!' úkk0r j0.
- rM -- rM /na hinùrhurm í/ 'which was grated by you' na hinùrhurm í,
/harúar ma/ 'it came out' harúar ma.
- rn -- rn /àsarnilóba/ 'beehive' àsarnilóba.
- rN -- rN /marNiNín/ 'to make a ringing sound' marNiNín.
- rl -- ll /malláNE/ 'to swim' marláNE.
- rr -- rr /marrára/ 'to be red' marrára.
- rh -- rh /marhúsip/ 'to whisper' marhúsip.
- ns -- ss /na madàbu d0 0s siat taNákkul/ 'It fell from my hand' na
madàbu d0 0n sian taNánhu, /sòN0s silúa/ 'as a present'
sòN0n silúa, /mabbàEs sàda sóp0/ 'to make a rice-barn'
manbàEn sàda sóp0, /doss0s sòddaN ni mataniári/ 'like the
sun's rays' dosh0n sòddaN ni mataniári, /daN deNgàs
sipaNàn0nnami Ón/ 'This food of ours is not good' daN deNgàn
sipaNàn0nnami Ón, /hòlas sa hálak/ 'only one person' hòlan sa
hálak, /dòNas sa sikkÓla/ 'school friend' dòNan sa sikkÓla,
/sìppas sudena í/ 'Put them all away' sìppan sudena í.

- ns -- ts /tarbaÉtsa/ 'it can be done by him' tarbaÉnsa, /tarboátsa/ 'it can be carried by him' tarboánsa, /matsusuári/ 'to sunbathe' mansùsuári, /hòlat sian nadáo/ 'only from a distance' hòlan sian nadáo, /dibòat si sútan/ 'brought by Sutan' diboàn si sútan, /maNutsáddE/ 'to lean' maNunsáddE, /paradehÓtsa/ 'to prepare it' paradehÓnsa.
- ns -- cc /maccóh0t/ 'to cease' mansÓh0t, /manabunihÓcca/ 'to hide it' manabunihÓnsa, /maccuákk0n/ 'to break off something' mansuákh0n, /paNuccaddÉan/ 'something to lean on' paNunsaddÉan.
- nh -- tt /paluNuttú/ 'too quiet' paluNunhú, /ùdat tabahába/ 'rain storm' ùdan habahába, /padalátt0n/ 'to drive (a car)' padalánh0n, /ubáttu/ 'my grey hair' ubánhu, /padeNgátt0n/ 'to reconcile' padeNgánh0n, /napuráttu/ 'my betel' napuránhu, /tittítu/ 'my ring' tittínhu, /gattukk0nÓtt0n/ 'to be hung up' gattuNh0nÓnh0n, /ipÓttu/ 'my tooth' ipÓnhu, /paribáttu/ 'my cousin' paribánhu, /maNátt0n/ 'to eat (something)' maNánh0n, /sobáttu/ 'my fire-wood' sobánhu.

3. GLOTTAL STOP ALTERNATING WITH ZERO

In utterance-final position a morpheme which in other positions has allomorphs ending in a vowel has an allomorph with an additional final glottal stop. For example, the morpheme *nasída* 'they' has an allomorph /nasídaq/ which occurs in utterance-final position. This type of allomorph often occurs before a brief pause within an utterance.

In utterance-initial position a morpheme which in other positions has allomorphs beginning with a vowel has an allomorph with an additional initial glottal stop, for example, the morpheme *ugásan* 'thing' has an allomorph /qugásan/ which occurs in utterance-initial position. This type of allomorph often occurs after a brief pause within an utterance.

Between a morph ending in a vowel and a following morph beginning with a vowel /q/ is often inserted, e.g. /maN-ula-q-akka-q-ula-0n/ 'to do jobs'. This occurs more often between words than between morphs belonging to the same word, more often in careful, deliberate speech than in rapid speech.

4. VOWEL CONTRACTION

A sequence of two identical vowels occurring across a morph boundary is contracted to a single vowel. If either vowel had primary or secondary stress, the resultant contracted vowel is similarly stressed. Examples: /ganaganán/ 'effigy' gana-ganá-an, /b0t0kku/ 'I shall know'

b0t0-ón-hu, /dída/ 'is seen' di-fda, /ditikkí/ 'at that time' di tikki í, /burí/ 'wash!' burí-i, /marnípi/ 'to dream' marni-ípi. In slow, deliberate speech uncontracted forms occur.

In rapid speech a sequence of two non-identical vowels is often contracted to a single vowel, e.g. /pétte/ 'wait!' paítte. There is a tendency in rapid speech for high and mid vowels to be replaced by semi-vowels after /a/, e.g. /áyk/ 'water' (for /aÉk/), /áw/ 'I' (for /áu/).

5. SAMPLE MORPHOPHONEMIC TRANSCRIPTION

The following is a morphophonemic transcription of the passage transcribed phonemically in Chapter II, section 8. A plus sign denotes pause; spaces denote word boundaries.

1. dina sada ári + marbàda d0 alògo d0h0t mataniári + tarìN0t tu hagogonasída.
2. jàla di tikki í + mamòlus d0 sa hàlak pardálan + na mamàkke bajujásna.
3. mardosnirÓha d0 nasída + na manaN ísE na boi manbáEn + si pardàlan ì manàNgal bàjujasna í + na í ma na gumògo.
4. di tikki í + maNùllus ma alogo ì maccai gogó.
5. aláí + lam digògo maNÓbbus + lam takkàs d0 dialìth0n pardàlan ì bàjujasna í.
6. ùjuNujúNna + mansòh0t d0 ibàna mancúbo.
7. duN í + mulài ma mataniari ì marsinÓddaN + jàla tuN maccai lás d0.
8. manigòr d0 attON dibùkka pardàlan ì bàjujasna í + jala maNòkku d0 alogo í + na gumògo mataniari ì sian ibána.

C. NON-AUTOMATIC MORPHOPHONEMICS

The phenomena covered in this part are morphophonemic in character, i.e. have to do with the phonemic representation of morphemes, but are such that the identity of the elements in question must be taken into consideration.

1. INSERTION OF s AND t

Between the prepositions tu and di, and a demonstrative, s is inserted. Examples: tu-s-ón 'hither', di-s-adú 'there', tu-s-í 'hither', di-s-ón 'here'.

Between the base iN0t 'memory' and the causative affix pa-, s is inserted, e.g. pa-s-iN0t 'to remind, warn'.

The base ijur 'spit' receives a prefixed t when it occurs in the non-conjugated stem marsi-t-íjur 'to spit (intransitive)' and in the conjugated stem tijur-h0n 'to spit out (transitive)'. Note also the third passive ni-t-ijurh0n to the stem t-ijurh0n, with the alternant ni- appropriate to a stem with an initial vowel.

2. REDUPLICATION

After the nominal affix ha- 'abstract' the first two morphophonemes of the underlying form are repeated. Examples: ha-lalás 'heat' (underlying form lás 'hot'), ha-mamársak 'sadness' (underlying form mársak 'to be sad'), ha-sasáhat 'arrival' (underlying form sáhat 'to arrive').

The morpheme sabi 'sickle' has an allomorph sasabi which occurs in the compound noun búlan-sasábi 'crescent moon'.

3. NASAL EXTENSION

A final n is added to certain words in certain contexts:

1. To numerals which end in a vowel and to the interrogative particle píga 'how many?', when they occur before súddut 'generation', pÓNg0l 'piece', gÓtap 'piece', jókkal 'span', lákka 'step', lÓppit 'fold', bóla 'half', baríba 'half', lÉbbar 'page', sÓdduk 'spoon'. Examples: sàN sÓdduk 'one spoonful', tòlun súddut 'three generations', sìan gÓtap 'nine pieces', sàN pÓNg0l 'one piece', sàN bóla 'one half', duàn lÓppit 'two folds', sàN lÉbbar 'one page', sàN jókkal 'one span'.
2. To the numerals dúa 'two', tòlu 'three', and líma 'five' before enclitic -sa 'all'. Examples: tolúnsa 'all three', duánsa 'both'.
3. To nouns ending in a vowel before any enclitic pronoun which does not begin with a nasal. Examples: bajún-hu (phonemically /bajúkku/) 'my clothes', bàju-múna 'your clothes', raján-ta 'our rajah', ràja-nasída 'their rajah'. Also to kinship terms ending in -N, with deletion of that final N, in the same contexts, e.g. tulán-ta 'our maternal uncle', tùlaN-nasída 'their maternal uncle'.

4. INFIXES ALTERNATING WITH PREFIXES

The infixes -in- and -um- alternate with prefixes under certain conditions, the conditioning factor being the nature of the initial morphophoneme of the underlying form.

-in- is replaced by the prefix ni- where the initial morphophoneme of the underlying form is a vowel or a voiced apical consonant.

Examples: ni-ajárh0n '*is taught*' (stem ajarh0n), ni-dók '*is said*' (stem d0k), ni-léan '*is given*' (stem lEan). The prefix also occurs in ni-tijúr0n '*is spat out*' (stem tijurh0n). In some instances competing forms occur, e.g. ni-húrak alongside h-in-úrak '*is dug out*'.

-um- is replaced by the prefix um- where the initial morphophoneme of the underlying form is a bilabial consonant. Examples: um-má0l '*more difficult*' (root ma0l '*difficult*'), um-pír '*harder*' (root pir '*hard*'), um-bó0t0 '*to know*' (stem b0t0 '*know*'), um-báEn '*to do*' (stem baEn '*do*'). Underlying forms in initial vowels add an initial m before taking the prefix um-. Examples: um-múli '*more beautiful*' (stem uli '*beautiful*'), um-márga '*more expensive*' (stem arga '*expensive*').

Before underlying forms beginning with other morphophonemes the prefix and the infix are in competition. In general my informants regard the forms with the infix as 'more correct', and in some cases label the forms with the prefix as 'childish' or 'unacceptable'. The prefix is preferred in the following cases: ums0mal (phonemically /uss0mal/) '*more usual*' (stem s0mal '*usual*'), umrára (phonemically /urrára/) '*redder*' (stem rara '*red*'), um-dátu (phonemically /uddátu/) '*wiser*' (stem datu '*wise*'), um-hólom (phonemically /ukkólom/) '*darker*' (stem holom '*dark*'). Examples of competing forms: lumápp0t and um-lápp0t '*softer*' (stem lapp0t '*soft*'), rumáhis and um-ráhis '*steeper*' (stem rahis '*steep*'), rumfar and um-ríar '*wilder*' (stem riar '*wild*'), gumóppis and umgóppis (phonemically /uggóppis/) '*more agile*' (stem goppis '*agile*'), gumógo and um-gógo (phonemically /uggógo/) '*stronger*' (stem gogo '*strong*'), lumógo and um-lógo '*drier*' (stem logo '*dry*'), humáduk and um-háduk (phonemically /ukkáduk/) '*more obscene*' (stem haduk '*obscene*'), humórmát and um-hórmát '*more polite*' (stem h0rmát '*polite*'), jumÉppEk and um-jÉppEk (phonemically /ujjÉppEk/) '*shorter*' (stem jEppEk '*short*').

5. INFLECTIONAL AFFIXES

The intensive affix has the basic allomorph -an when it co-occurs with the second or third passive affix, e.g. ha-ulák-an (phonemically /hauláhan/) '*can be repeated*' (second passive affix ha-, intensive stem ulak-i '*to repeat*', consisting of the base ulak (cf. the verb stem m-ulak '*to return*') and the intensive affix -i), b-in-ab0-an '*was weeded*' (third passive affix -in-, intensive stem bab0-i '*to weed*', consisting of the base bab0 (cf. the verb stem mar-bab0 '*to do the weeding*') and the intensive affix -i).

When the intensive affix and the fourth passive affix co-occur they are represented by the suffix -an, e.g. g0ár-an '*to be called*' (intensive stem g0ar-i '*to call*', consisting of the base g0ar (cf. the noun góar '*name*'), intensive and fourth passive affixes represented by -an).

The second passive affix has the basic allomorph *ha-* when it co-occurs with the intensive affix, e.g. *ha-dalán-an* 'can be covered, walked' (intensive stem *dalan-i*, consisting of the base *dalan* (cf. the noun *dálan* 'way') and the intensive affix *-i*). Thus a combination of the intensive and second passive affixes regularly results in the replacement of *tar-...-i* by *ha-...-an*. It may be noted, however, that one informant distinguished between *ha-podá-an* 'teachable (in general)' and *tar-podá-i* 'can be advised (on this one occasion)' (intensive stem *poda-i* 'to advise, teach'). Another informant offered the form *tar-pikkír-i* 'can be imagined' (intensive stem *pikkir-i* 'to imagine').

The active affix has the basic allomorph *mar-* before the stems *suru* 'send' and *sali* 'borrow', hence *mar-súru* 'to send' and *mar-sáli* 'to borrow'. The regular forms *manúru* and *manáli* also occur.

The active affix has the basic allomorph *-h0n* after the causative affix, e.g. *pa-ulí-h0n* 'to construct' (active affix *-h0n*, causative stem *pa-uli* consisting of the base *uli* and the causative affix *pa-*).

The active affix has the basic allomorph *m-* before the stem *inum* 'to drink', and the basic allomorph *marni-* before *ida* 'see', and *ipi* 'dream', hence *mínum* 'to drink', *marnída* 'to see', and *marnípi* 'to dream'. The regular forms *maNínum*, *maNída*, and *maNípi* also occur.

Before the following stems *-um-* is in competition with *maN-*: *b0t0* 'know', *bege* 'hear', *tadda* 'recognise', *bErEn* 'look at', and *tubuh0n* 'bear (a child)'. The following pairs of forms occur therefore: *manbóto* and *umbóto* 'to know', *manbegé* and *umbegé* 'to hear', *manádda* and *tumádda* 'to recognise', *mamérEn* and *umbErEn* 'to see', *manubúh0n* and *tumubúh0n* 'to bear (a child)'.

The fourth passive affix is doubled after *d0k* 'say', hence *d0k0n0n* (phonemically /d0h0n0n/) 'to be said'.

After the circumstantial affix *-h0n* the fourth passive affix *-0n* adds *-h0n* after it unless the verb it occurs in is immediately followed by an agent noun phrase. Examples: *gadis-h0n-0n-h0n* (phonemically /gadiss0n0tt0n/) 'to be sold' (circumstantial stem *gadis-h0n*, consisting of base *gadis* and circumstantial affix *-h0n*, followed by fourth passive affix *-0n*, followed by *-h0n*), *gattuN-h0n-0n-h0n* (phonemically /gattukk0n0tt0n/0 'to be hung' (circumstantial stem *gattuN-h0n*, consisting of the base *gattuN* and circumstantial affix *-h0n*, followed by the fourth passive affix *-0n*, with added *-h0n*). Examples in sentences: *àha si gadish0n0nh0n* 'What is going to be sold?', *dàa si gattuNh0n0nh0n* 'Which one is going to be hung up?', *àha si gattuNh0n0n-hu* 'What shall I hang up?'.

After the causative affix *pa-* the fourth passive affix is *-0n* after certain bases and *-h0n0n* after others, the latter affix adding an

additional -h0n under the same conditions as the -0n which occurs after the circumstantial affix (see preceding paragraph), e.g. pa-balí-0n 'to be banned' (causative stem pa-bali 'to ban'), pa-masúk-0n 'to be inserted' (causative stem pa-masuk 'to insert'), pa-bErEN-bErÉN-0n 'to be looked at' (causative stem pa-bErEN-bErEN 'to look at'), pa-tudú-h0n0n 'to be shown' (causative stem pa-tudu 'to show'), pa-lumE-hó0n 'to be sold' (causative stem pa-lumE 'to sell').

6. THE AFFIXES maN- AND paN-

The affix maN- is represented by the following basic allomorphs:

1. maN- before vowels. Examples: maN-állaN 'to eat', maN-úsuN 'to carry', maN-ìhut-íhut 'to follow', maN-usÉ-h0n 'to spill'.
2. maNa- before l, n, and r. Examples: maNa-lÉan 'to give', maNa-napurán-i 'to hand round betel', maNa-ríppu 'to guess'.
3. man- before d, g, k, h, j, c. Examples: man-dúda (phonemically /maddúda/) 'to stamp (rice)', man-gádis (phonemically /maNgádis/) 'to sell', man-karejó-h0n 'to do' (phonemically /makkarejóh0n/), man-jálo (phonemically /majjálo/) 'to receive', man-cúbo (phonemically /maccúbo/) 'to try'.
4. ma- elsewhere. If the initial morphophoneme of the underlying form is not a nasal, it is replaced by the nasal with the same point of articulation: p and b by m, t and s by n. When an underlying form contains a doubled root the initial morphophonemes of both sequences undergo the replacement rule. Examples: ma-múkkul 'to beat' (stem pukkul), ma-mìkkir-mikkír-h0n 'to ponder over' (stem pikkir-pikkir-h0n), ma-matá-h0n 'to supervise' (stem mata-h0n), ma-mólus 'to pass' (stem bolus), ma-narú-h0n 'to convey' (stem taru-h0n), ma-nòmu-nómu 'to go and meet' (stem t0mu-t0mu), ma-naÉk-i 'to ascend' (stem naEk-i).

Verbs from three common roots with initial b- take man-, namely baEn 'do', boan 'bring', and buat 'take', hence man-báEn (phonemically /mabbáEn/) 'to do', man-bóan (phonemically /mabbóan/) 'to bring', and man-búat (phonemically /mabbúat/) 'to take'.

In my informants' speech a number of verbs which are listed in Van Der Tuuk's and Warneck's dictionaries as taking ma-, either take man-exclusively or have both forms in competition. Examples of verbs which now take man- are as follows: man-baták-i 'to ride a horse' (stem batak-i), man-bódil 'to shoot' (stem bodil), man-badá-i 'to scold' (stem bada-i), man-bugán-i 'to wound' (stem bugaN-i). Examples of verbs which show competing forms are as follows: man-bót0 and ma-mót0 'to know' (stem b0t0), man-búkka and ma-múkka 'to open' (stem bukka),

man-bÉrEN and ma-mÉrEN 'to see' (stem bErEN), man-búnu and ma-múnu 'to kill' (stem bunu), man-bílaN and ma-mílaN 'to count' (stem bilaN), man-báloS and má-maloS 'to answer (a letter), take revenge on' (stem baloS).

The initial ma of the affix maN- is deleted before two stems beginning with paN, namely paNan 'eat' and paNidO 'ask', hence máNan 'to eat' and maNídO 'to ask'.

The following stems with initial s occur with man-: man-sÓhOt 'to cease' (stem sOhOt), man-suák-hOn 'to break off' (stem suak-hOn).

The affix paN- has analogous basic allomorphs:

1. paN- before vowels. Examples: paN-íhut 'follower', paN-ágo 'destroyer', paN-ísi 'inhabitant'.
2. paNa- before l, n, and r. Examples: paNa-lÓppa 'cook', paNa-nápu 'person who spreads fertiliser', paNa-lúga 'oar'.
3. pan- before d, g, k, h, j, and c. Examples: pan-dúda 'person who pounds (rice)', pan-gátti 'successor', pan-húliN 'voice', pan-jága 'watchman'.
4. pa- elsewhere. If the initial morphophoneme of the underlying form is not a nasal, it is replaced by the nasal with the same point of articulation: p and b by m, t and s by n. When an underlying form contains a doubled root the initial morphophonemes of both sequences undergo the replacement rule. Examples: pa-nákkO 'thief' (root takkO), pa-múnu 'murderer' (root bunu), pa-mOtÓ-an 'knowledge' (root bOtO), pa-nurát-an 'something on which one writes' (root surat), pa-màsu-masú-On 'wedding' (root pasu-pasu 'blessing').

Roots with initial b which take man- also take pan-, and there is the same fluctuation in usage between pan- and pa- that we have observed in the case of man- and ma- above. Examples: pan-baÉn-On 'action' (root baEn), pan-balÓs-On and pa-malÓs-On 'revenge' (root baloS), pan-buhá-i 'seducer' (root buha), pan-búkkus and pa-múkkus 'wrapper' (root bukkus).

The morpheme paN- 'plural' has the basic allomorph pan- before p and b as well as the morphophonemes listed under 3 above. Examples: di-pan-putík-hOn 'plucked in large numbers or several times' (root putik), di-pan-pÉak-hOn 'placed' (root pÉak), di-pan-boán-i 'brought' (root boan), di-pan-buát-i 'taken' (root buat).

7. STRESS PLACEMENT RULES³

The domain within which stress rules apply is the stress unit. A stress unit is any one of the following:

a. A sequence consisting of a noun stem and an enclitic pronoun, e.g. tuláN-na 'his maternal uncle'.

b. A sequence consisting of a verb and an enclitic pronoun, e.g. pukkulón-na 'he will strike', manbuát-sa 'to take it', tarbuát-sa 'can be taken by him'.

c. A sequence consisting of a noun and a demonstrative, e.g. ràja Ón 'this rajah', hòdana í 'his horse'.

d. Any word which is not part of a stress unit by virtue of any of the preceding definitions, e.g. hòda 'horse', Ón 'this one'.

Note that in the morphophonemic transcription used here an enclitic pronoun is written together with the preceding noun or verb, e.g. hodána 'his horse', b0t00nna 'he will know'.

The stress placement rules within a stress unit are as follows:

1. In a stress unit consisting of a noun and a demonstrative, primary stress occurs on the demonstrative, e.g. hòda Ón 'this horse', hòda án 'that horse'.
2. Monosyllabic stress units have primary stress on their only syllable, e.g. Ón 'this one', rák 'lung', más 'gold', ró 'to come', só 'to stop', láas 'hot'.
3. A polysyllabic stress unit has primary stress on the final syllable if any one of the following conditions holds:

a. The penultimate syllable of the stress unit is an infix, prefix, or reduplicated syllable, e.g. l-um-ás 'hotter', um-pír 'harder', ha-la-lás 'heat'.

b. It is an adjective and either

(i) it contains the affix -hu or the affix -an, e.g. pa-las-hú 'too hard', pa-pir-hú 'too hard', pa-deNgan-hú (phonemically /padeNgakkú/) 'too good', uli-án 'more beautiful', d-um-eNgan-án 'better'; or

(ii) it contains no affix, and is not immediately preceded by the adjectivising particle na, húraN 'insufficiently', or sadía 'how much', e.g. deNgán 'good', gogó 'strong', tibbó 'high', bukká 'open', h0rmát 'polite'.

c. It is a noun and either

(i) it is a vocative form, e.g. bErÉ 'Nephew!', ràja-namí 'Sir!', amáN 'Brother!', ìnaNudá 'Aunt!';

(ii) it contains the enclitic pronoun allomorph -m, e.g. hutá-m 'your village'.

d. It is a verb, and either

(i) it is an onomatopoeic verb containing the prefix *mar-*, e.g. *mar-labáp* 'to bump', *mar-laták* 'to snap', *mar-liNík* 'to squeal, yelp', *mar-sarák* 'to gush', *mar-tatá* 'to laugh'; or

(ii) it contains one of the following roots: *bege* 'hear', *paula* 'pretend', and no suffix, e.g. *man-begé* 'to hear', *di-begé* 'heard', *hu-begé* 'heard by me', *hu-paulá* 'I pretended'.

e. It is a word belonging to the following list: *debatá* 'god', *sutará* 'silk', *detík* 'second', *minít* 'minute', *hOtÉl* 'hotel', *tiNgán* 'to fall', *dabú* 'to fall', *tuNgalín* 'to topple over', *ragÉ* 'to lie about (of corpses)', *pEák* 'to lie', *rappín* 'to loosen', *manát* 'to take care', *hamú* 'you (plural)', *sudé* 'all', *bEHá* 'how', *hián* 'previously', *nián* 'in actual fact', *huhút* 'at the same time', *hapÉ* 'however', *attÓN* 'indeed', *musÉ* 'again, later', *dOpÉ* 'still, yet', *nakkinín* 'just now', *tibú* 'soon', *pittór* 'immediately', *manigór* 'immediately', *tOrús* 'straightway', *girá* 'as soon as possible', *tONtÓN* 'always', *sogót* 'early', *saOtík* 'a little', *tOtÓp* 'continually'.

4. Otherwise a polysyllabic stress unit has primary stress on the penultimate syllable, e.g. *bégu* 'spirit', *tamúE* 'guest', *húddul* 'to sit', *mar-lÁNE* 'to swim', *hámi* 'we (exclusive)', *nasída* 'they', *labú-an* 'harbour', *bàrsi-barsí-On* 'to sneeze', *dapót-an* 'to find', *na déNgan* 'good', *sadía déNgan* 'how good', *dàN sadia déNgan* 'not very good', *hùraN déNgan* 'not good enough', *duméNgan* 'better', *umbótO* 'to know', *bagás-mu* 'your house', *hodán-hu* 'my horse', *halibutÓNan* 'rainbow'.

5. A secondary stress falls on the penultimate syllable of the first of two identical dissyllabic morphs, e.g. *làNan-laNán* 'pale', *hàdaN-hadáN-an* 'pouch carried over the shoulder', *hàu-háu* 'stick', *hòda-hóda* 'hobby-horse'.

6. A secondary stress falls on the penultimate syllable of a noun stem if any one of the following conditions holds:

a. It is immediately followed by a demonstrative, e.g. *hòda í* 'the horse', *jàbu ón* 'this house';

b. It is immediately followed by an enclitic pronoun with two or more syllables, e.g. *jàbu-nasída* 'their house', *hùta-námi* 'our village'

c. It is immediately followed by an enclitic pronoun with fewer than two syllables, provided a demonstrative immediately follows, e.g. *jàbu-an í* 'his house', *jàbu-m í* 'your house', *jàbun-h í* (phonemically /jàbukkí/) 'my house'.

8. DELETION OF FINAL -u

1. The enclitic pronoun *mu* 'you (singular)' has the basic allomorph *m* when the preceding stem ends in a vowel, e.g. *jabú-m* 'your house', cf. *bagás-mu* 'your house'.

2. The enclitic pronouns *mu* 'you (singular)' and *hu* 'I' have basic allomorphs *m* and *h* respectively when they are immediately followed by a demonstrative, e.g. *àNgi-m Ón* 'this brother of yours', *bàjun-h í* (phonemically /bàjukkí/) 'my clothes', *jòlman-h án* (phonemically /jòlmakkán/ 'that wife of mine'.

D. MORPHEME STRUCTURE

By morpheme structure is meant the morphophonemic composition of single unanalysable forms before morphophonemic rules have been applied.

The majority of non-affixal morphemes are dissyllabic, the majority of affixal morphemes and particles are monosyllabic. The following are the shapes of non-affixal morphemes in terms of syllable structure. C stands for any consonant and V for any vowel.

CV	sá 'kind of snake', só 'to stop'
CVC	rák 'lung', túr 'dry land', Nót 'awake', dók 'say', lás 'hot', ráp 'together'
VV	íu 'shark', áu 'I'
VCV	ulí 'beautiful', ári 'day', émE 'paddy', ÓlO 'wish', ípi 'dream'
VVC	iás 'clean', uás 'thirst', áEk 'water'
VCVC	ípOn 'tooth', íguN 'nose', óbuk 'hair'
CVV	jóu 'call', sía 'nine', táO 'lake'
CVCV	gogó 'strong', máta 'eye', rája 'rajah'
CVVC	léan 'give', báEn 'do', túan 'master'
CVCVC	sísik 'fish-scale', sogót 'early', bíbir 'lip', pátik 'law, agreement'
VCCV	Édde 'song', áNgO 'smell', ártá 'property', púrba 'east'
VCCVC	úkkOr 'dive', Órbuk 'dust', áppaN 'basket'
CVCCV	jólma 'human being', táNga 'ladder', hórja 'religious feast'
CVCCVC	bóRNin 'night', lóppit 'fold', táNgaI 'loose'

The following is a selection from possible trisyllabic stem morpheme shapes:

VVCV	aíli 'wild boar'
VCVV	adúi 'that yonder'
VVCVCV	alógo 'wind', abára 'shoulder'
VVCVCVC	ugásan 'thing, property'
CVVV	buía 'crocodile'
CVVCV	muára 'mouth (of a river)'
CVCVV	tamúE 'guest'
CVCVCV	hudáli 'spade', debatá 'god'
CVCVVC	halúaN 'flying fox', babíat 'tiger'
CVCVCVC	binátaN 'wild animal', haráNan 'jungle', sibágur 'toad'
CVCVCCV	panáNga 'dog'
CVCVCCVC	guráppaN 'fresh-water crab', harábbir 'coconut'
VCCVV	ikkáu 'side-dish'
VCCVCV	addóra 'chest', appára 'brother by adoption'
VCCVVC	aNgíat 'in the hope that'
VCCVCVC	abbálaN 'sling', abbólas 'hail'
CVCCVV	parbúe 'fruit'
CVCCVCV	tiNgála 'plough', jaddéla 'window'
CVCCVCVC	jappálan 'meadow', takkúrak 'skull'

Many non-affixal morphemes fall into types:

1. Comprising two identical open syllables: búbu 'fish trap', gogó 'strong', tutú 'true', lúlu 'look for', héhE 'get up', NÉNE 'chicken-pox', súsu 'breast'.
2. Comprising an open syllable followed by a closed syllable such that the morphophonemes comprising the open syllable and the first two morphophonemes of the closed syllable are identical: bíbir 'lip', j0jór 'in order', NONÓN 'dumbfounded', huhút 'at the same time', tútuN 'burn'.
3. Comprising two identical closed syllables: láklak (phonemically /láqlak/) 'skin (of fruit)', dápdap (phonemically /dáqdap/) 'shadow-tree', NERNÉR 'gradual', tONTÓN (phonemically /t0ktÓN/) 'always', díNdín 'wall', mEtmÉt (phonemically /mEqmÉt/) 'small', tórt0r 'dance'.

4. Consisting of si- followed by two syllables: siámun 'right', sibáruN 'heron', sibás0 'midwife, medium', sijóbbiN 'spider', simáta 'bead', sirábun 'ashes', sisílon 'nail'.
5. Consisting of the sequence -in- infixed in a dissyllabic sequence: bináNa 'small river', binátaN 'wild animal', sinám0t 'bride price', pináhan 'domesticated animal'.
6. Consisting of the sequence -al- infixed in a dissyllabic sequence: baláNa 'iron pan', balóbas 'ruler', galúbbaN 'wave', halífaN 'around', halílu 'shadow', halúaN 'flying fox', laláEn 'mad', salíbon 'eyebrow'.
7. Comprising two identical dissyllabic sequences: àlEá!E 'friend', hàEhÁE 'thigh', ùt0kútk (phonemically /ùt0hútk/) 'brain', hùliNhúliN (phonemically /hulikkuliN/) 'leather, skin', àruáru 'throat'.

Affixes have the shape CV or VC (e.g. di-, pa-, ta-, hu-, -0n, -an, -na, -um-, -in-), more seldom V, CVC, or CVCV (e.g. -i, par-, maN-, tar-, -h0n, maNa-).

Voiced stops do not occur finally in basic allomorphs.

N O T E S

1. For the replacements rules which characterise the dialect described by Van der Tuuk, see his *Tobasche Spraakkunst* (1864-67), paragraphs 8-16. Those rules differ from the ones presented here in the following respects:

a. *ns* is replaced by */ts/* in all environments. Van der Tuuk's dialect did not have */c/*.

b. *ss* and *sh* are replaced by */ts/*. Thus *hushús* 'sweet smelling' was pronounced */hutsús/*, and *tartONÓssa* 'can be sent by him' */tartONÓtsa/*.

c. Van der Tuuk mentions two possible outcomes of *mh*, namely */pp/* and */kk/*. His examples are as follows: *hadámhu* 'my box' phonemically */hadáppu/*, *òn0m húpaN* 'six kupangs' phonemically */òn0k kúpaN/*, and *òn0m hÓrb0* 'six buffaloes' phonemically either */òn0p pÓrb0/* or */òn0k kÓrb0/*. It may be noted that Van der Tuuk also mentions the two outcomes of *nh* which characterise the dialect of my informants. His examples are as follows: *tian húta* 'from a village' phonemically */tiak kúta/*, *tittínhu* 'my ring' phonemically */tittíttu/*, and *napuránuhu* 'my betel' phonemically */napurákku/* or */napuráttu/*.

d. The sequences *mb*, *nd*, and *nj* remain unchanged, i.e. are not replaced by */bb/*, */dd/* */jj/*.

e. Van der Tuuk does not mention hearing a glottal stop.

f. */h/* and */k/* were complementarily distributed, */h/* initially and intervocalically, */k/* elsewhere.

g. According to Van der Tuuk (1864-67:24, fn.1) the replacement rules did not apply between a first passive verb and an immediately following subject. Hence *dipáNan manuk ì* was pronounced */dipáNan manuh ì/* if it meant 'The chickens were eaten', but */dipaNàm manuh í/*

if it meant '*(It was) eaten by the chickens*'. I have found no such consistent distinction to be made in the speech of my informants.

2. Nababan (1966:13-14) regards this as the normal outcome of a sequence of two voiceless stops. In the speech of my informants, however, the assimilation does not occur at word boundaries and is in free variation with replacement by glottal stop word-internally.

3. For Van der Tuuk's description of stress see *Tobasche Spraakkunst* (1964-67) paragraphs 18-20. Note that he makes the following statement: 'Batak has only syllable stress within a word; word stress by means of which emphasis is placed on a particular word in a sentence is unknown' (paragraph 20, note 2). This statement is not true of the speech of my informants.

CHAPTER IV

MORPHOLOGY

A. INTRODUCTION

This chapter deals with the morphemic composition of words. Except for certain special cases the relation between two immediate constituents below the word level is either one of co-ordination or one of subordination. In the case of co-ordination both immediate constituents are members of large form classes and typically occur as free forms (though in certain instances this may not be so). In the case of subordination, on the other hand, only one immediate constituent is a member of a large form class capable of occurring as a free form, while the other is a member of a small class and is invariably a bound form. Immediate constituents of this latter type are termed *affixes*. Any immediate constituent which is not an affix is an *underlying form*.

For example, *píra-mánuk* '*hen's egg*' consists of two immediate constituents, *píra* and *manuk*. The relation between them is one of co-ordination since both of them belong to the form class of nouns and occur as free forms: *píra* '*egg*' and *mánuk* '*hen*'. Hence *píra* and *manuk* in *píra-mánuk* are termed co-ordinate underlying forms.

An example of subordination is provided by the word *mar-píra* '*to lay eggs*'. Here only the second immediate constituent, *píra* '*egg*', belongs to a large form class, while the first *mar-* belongs to a small class, the class of verbal affixes.

In many instances words reveal more than one layer of affixes. The word *ditabuníh0n* '*is hidden*', for example, consists of the affix *di-* and the underlying form *tabunih0n* '*hide*'. The latter form is, however, still analysable, as can be seen if it is compared with the adjective *buní* '*hidden*' and the verb *di-buníh0n* '*is hidden*'. It follows that the underlying form *tabunih0n* consists of the affix *-h0n* and the underlying

form *tabuni*, and that the form *tabuni* consists in turn of the affix *ta-* and the underlying form *buni*. There are thus three different underlying forms exemplified: *tabunih0n*, *tabuni*, and *buni*, and as many affixes: *di-*, *ta-*, and *-h0n*.

Since it is not the case that all underlying forms co-occur with all affixes, it is convenient to use different terms in referring to the several layers of immediate constituents. In the example just discussed we say that *buni* is a root, *tabuni* a base, and *tabunih0n* a stem. Similarly *di-* is an inflectional affix, *-h0n* a derivational affix, and *ta-* a primary affix. In this way it is possible to specify what affixes co-occur with what underlying forms. Primary affixes derive bases from roots. Derivational affixes derive stems, either from other stems, or from bases. Inflectional affixes derive words from stems. A word which does not contain an inflectional affix is itself a stem. Hence all nouns are stems, since in Toba-Batak no noun contains an inflectional affix.

It follows also that it is possible for an underlying form to be a root, a base, and a stem at the same time. Thus the word *di-gádis* 'is sold' consists of the inflectional affix *di-* and the stem *gadis*. But since this stem is not further analysable, it is also a base and a root.

In certain instances an underlying form may itself be a morphemically complex word. Thus the noun *hamarsák0n* (phonemically /hamarsáh0n/) 'sadness' is a stem and consists of the affix *ha-...-0n* and the underlying form *marsak*. The latter form, however, is an intransitive verb *mársak* 'to be sad', which is a stem consisting of the affix *m-* and the base *arsak* (compare the noun *ársak-ni-róha* 'melancholy'). The noun *halé0n* 'hunger', on the other hand, contains the same affix as *hamarsák0n*, but its underlying form is not a word: *lE* is a base which recurs in the verb *ma-lé* 'to be hungry'. Thus *halé0n* is an example of base-to-stem derivation, and *hamarsák0n* an example of stem-to-stem derivation. It follows also that the affix *ha-...-0n* derives stems from stems, and also stems from bases.

Affixes, stems, bases, and roots are also classified in terms of the word class of the word in which they appear. There are, therefore, verbal affixes, noun stems, and so forth. As in the case of stem, base, and root there is some overlap among noun stems and verb stems. Many stems appear both in nouns and verbs. Moreover, in cases of stem-to-stem derivation a single word may contain an outer noun affix and an inner verbal affix. Such was the case in our example *hamarsák0n* 'sadness' cited above.

Primary and derivational affixes have limited productivity. Given an arbitrary root, for example, it is not possible to predict what bases

and stems it will appear in. Hence the lexicon of Toba-Batak is a list of stems, not a list of roots.

In a few cases the relation between immediate constituents on the stem level is like that which exists between words in a syntactic construction. An analysis into affix and underlying form is not possible in these cases. For example, some noun stems consist of two noun stems separated by the constituent *ni*, just as many noun phrases consist of two noun phrases separated by the word *ni*. An example of such a word is the noun stem *màta-ni-ári* 'sun', which contains the two noun stems *mata* 'eye' and *ari* 'day' together with the constituent *ni*. This arrangement may be compared with a noun phrase such as *ràja ni hùta í* 'the rajah of the village'. Stems such as *màta-ni-ári* will be termed *phrasal stems*. Like other stems a phrasal stem may appear as a sub-constituent in a word and co-occur with an affix which derives stems from stems. For instance, the phrasal stem *las-ni-róha* 'joy' (containing the nouns *lás* 'heat' and *róha* 'disposition') occurs in the noun *halalasniróha* 'joy' together with the affix *ha-* 'abstract', and also in the non-conjugated verb *marlasniróha* 'to be joyful'. It is not clear to what extent this type of formation is still productive.

B. NOUN MORPHOLOGY

All nouns are stems, i.e. no noun contains an inflectional affix. A morphemically unanalysable noun stem consists of a root, e.g. *bórnin* 'night', *hálak* 'person', *bégu* 'spirit'. Morphemically analysable noun stems are of three types: compound nouns, phrasal nouns, and complex nouns.

1. COMPOUND NOUNS

In a compound noun the relation between the two immediate constituents is one of co-ordination. In a doubled root noun the two constituents are identical. The semantic relation between a doubled root noun and the corresponding root noun varies in different instances:

a. In many cases the doubled root noun has a connotation of smallness or refers to an object which is a representation of the object referred to by the root noun, e.g. *hòda-hóda* 'hobby horse'--*hóda* 'horse', *ràtti-ràtti* 'twig'--*ràtti* 'branch', *sòp0-sòp0* 'small look-out hut'--*sòp0* 'rice barn', *dòlok-dólok* 'hill'--*dólok* 'mountain'.

b. Some doubled root nouns designate the instrument required to carry out the action referred to by the underlying form, e.g. *pàsak-pásak* 'hammer' (cf. the verb *pasak-i* 'to hammer'), *ùla-úla* 'tool' (cf. the verb *ula* 'to work').

c. In some instances the doubled root noun is related semantically to the root noun in a manner peculiar to each case, e.g. ìna-ìna 'married woman'--ìna 'mother', OsaN-OsaN 'jaw'--ÓsaN 'chin', làNít-láNít 'ceiling'--láNít 'sky'.

Among remaining compound nouns two types can be distinguished. In the first type both constituents recur as independent noun stems, while in the second type only the first constituent does so, the second constituent recurring as an adjectival stem. In both types the second constituent semantically limits the first.

Examples of the first type: hùtiN-bòrubóru 'female cat' (hútiN 'cat', bòru-bóru 'girl'), páddE-más 'goldsmith' (páddE 'craftsman', más 'gold'), hàu-taNgúruN 'spine' (háu 'tree', taNgúruN 'back'), dÒstOr-ípOn 'dentist' (dÓstOr 'doctor', ípOn 'tooth'), àri-hamamátE 'Good Friday' (ári 'day', hamamátE 'death').

Examples of the second type: hòrb0-rfár 'wild buffalo' (hòrb0 'buffalo', riár 'wild'), àri-lógo 'dry season' (ári 'season, day', logó 'dry'), ta0-bolak 'sea' (tá0 'lake', bolák 'broad, wide'), tà0n-báru 'New Year' (tá0n 'year', in-barú 'new'), dàlan-bálgá 'main street' (dálan 'way', balgá 'large').

2. PHRASAL NOUNS

Phrasal nouns are phrasal stems (see the introduction to this chapter). There are three types:

a. In the first type the immediate constituents are si, a conjugated verb stem, and a noun stem. Thus in the noun si-pèle-bégu 'heathen', the second constituent is the conjugated verb stem pele 'to sacrifice to, worship' and the third constituent is the noun stem bégu 'spirit'. Thus the constituents are related to one another as in the verb phrase mamèle bégu 'to worship spirits'. Further examples are as follows: si-tàrik-táli 'rope-puller' (tarik 'pull', táli 'rope'), si-gàgat-dúhút 'grass-eater', i.e. 'buffalo' (gagat 'eat', dúhút 'grass').

b. In the second type the immediate constituents are si, an adjectival stem, and a noun stem. Examples: si-bòttar-máta 'white-eyed person, white man' (bòttár 'white', máta 'eye'), si-bàlgá-íguN 'a person with a big nose, Big Nose' (balgá 'large', íguN 'nose').¹

c. In the third type the immediate constituents are arranged as in a noun phrase, e.g. màta-ni-àri-ni-pát 'ankle' (immediate constituents màta-ni-ári 'sun', ni and pát 'foot'), lòm0-ni-rÓha 'pleasure' (lómó 'pleasing', rÓha 'disposition'), na-marbáju 'woman who has not yet borne a child' (na 'relativising particle', marbáju 'to wear a skirt') cf. na marmánuk 'who has a chicken'.²

3. COMPLEX NOUNS

In a complex noun the immediate constituents are an underlying form and an affix.³ The affixes which appear in complex nouns fall into two main groups. In the first group are nine affixes which occur as morphological representatives of five distinct morphemes. Each of the five morphemes chooses a subset of these nine affixes, no morpheme having fewer than two different affixes to represent it. The choice of affix depends on the nature of the underlying form with which the morpheme occurs.

The five morphemes have the following meanings:

- (1) Actor: the person who performs the action.
- (2) Action: the process of performing the action.
- (3) Quality: the possession of such and such an attribute.
- (4) Location: the place where some action is performed or some object is appropriate.
- (5) Instrument: the object used in performing some action.

The nine affixes are paN-, par-, ha-, paN-...-an, par-...-an, ha-...-an, paN-...-0n, ha-...-0n, and -an. The distribution of affixes among morphemes is represented in the following diagram. The columns represent morphemes and the rows affixes. A check mark appearing at the intersection of a row and a column indicates that the affix occurs as a representative of that morpheme.

	Actor	Action	Quality	Location	Instrument
paN-	x	x			x
par-	x	x			x
ha-		x			
paN-...-an		x		x	x
par-...-an		x		x	x
ha-...-an			x	x	
paN-...-0n		x			
ha-...-0n			x		
-an				x	

The factors on which the choice of affix depends are as follows:

The first morpheme, with the meaning 'actor', is represented by the following affixes:

1. pan- when it occurs with conjugated verb stems:

panákk0	'thief'	takk0	'to steal'
paNalÓppa	'cook'	lOppa	'to cook'
panjága	'watchman'	jaga	'to guard'
paNíhut	'follower'	ihut	'to follow'
paNgátti	'successor'	gatti	'to substitute'
pamúnu	'murderer'	bunu	'to kill'
pandáNgur	'thrower'	daNgur	'to throw'
paNiNáni	'inhabitant'	iNani	'to dwell'
paNurúpi	'helper'	urupi	'to help'

2. par- when it occurs with non-conjugated verb bases. In the following examples the complex noun is quoted in the left column, the verb base in the middle column, and the verb stem in which the base occurs in the column on the extreme right.

parÉddE	'singer'	EddE	'to sing'	marÉddE
parÉkkEl	'one who laughs'	EkkEl	'to laugh'	marÉkkEl
parkaréjo	'worker'	karejo	'to work'	markaréjo
pargúru	'pupil'	guru	'to learn'	margúru
parmúruk	'one who is angry'	muruk	'to be angry'	múruk
parùNutúNut	'one who grouses'	uNutuNut	'to grouse'	murùNutúNut
pardálan	'traveller'	dalan	'to travel'	mardálan
parsikkÓla	'scholar'	sikkÓla	'to go to school'	marsikkÓla
parsúlin	'flute player'	sulin	'to play the flute'	marsúlin

The morpheme which has the meaning 'action' is represented by the following affixes:

1. ha- when the underlying form is (a) a non-conjugated verb stem which is either a base stem or contains the affix m-, or (b) an adjectival stem:

- (a) habÓbÓrhat 'departure' bÓrhat 'to depart'
 hasasáhat 'arrival' sáhat 'to arrive'
 hatutúbu 'birth' túbu 'to be born'
 mamamátE 'death' mátE 'to die'
 hamumúlak 'return' m-úlak 'to return'
 hamamársak 'sadness' m-ársak 'to be sad'
- (b) hasisíttON 'truth' sittÓN 'true'
 halalás 'heat' lás 'hot'
 hasosógo 'hatred' sogó 'unfriendly'
2. paN- when the underlying form is a conjugated verb stem:
 pamÉrEN 'sight' bErEN 'to see'
 paNúllus 'blowing' ullus 'to blow'
 panhúlin 'sound' hulin 'to make a sound'
 paNgÓra 'shout' gÓra 'to shout'
 paNúkkOr 'snoring' ukkOr 'to snore'
 panÉtEk 'dropping' tEtEk 'to drop'
3. paN-...-ON when the underlying form is a conjugated verb stem:
 panjuđOn 'refusal' jua 'to refuse'
 pamàsumasúON 'blessing' pasupasu 'to bless'
 panbaÉnON 'action' baEn 'to do'
 panhatafON 'speech' hata-i 'to talk'
4. par- when the underlying form is a non-conjugated verb base:
 parbfccar 'rising' bfccar 'to rise'
 parjÓNjON 'standing' jÓNjON 'to stand'
 parmátE 'death' mátE 'to die'
 parjádi 'happening' jádi 'to take place'
5. par-...-an when the underlying form is a non-conjugated verb base:
 parhataán 'language' mar-háta 'to speak'
 parmuláan 'beginning' mulá-i 'to begin'
 parNólúan 'life' ma-Nólu 'to live'
 parmaráan 'danger' mára 'to be dangerous'

6. paN-...-an when the underlying form is a conjugated verb stem:

pamOtÓan	'knowledge'	bOtO	'to know'
pamErÉNan	'sight'	bErEN	'to see'
panhilaláan	'feeling'	hilala	'to fell'
panagáman	'expectation'	tagam	'to expect'

The morpheme whose meaning is 'quality' is represented by the following affixes:

1. ha-...-an when the underlying form is (a) an adjectival stem, or (b) a non-conjugated verb base:

(a)	hatigÓran	'honesty'	tigÓr	'honest'
	hatOráNan	'explanation'	tOráN	'clear'
	hapastían	'certainty'	pastí	'certain'
	hapOrlúan	'necessity'	pOrlú	'necessary'
(b)	hasOmálan	'custom'	sÓmal	'to be usual'
	haNolúan	'life'	ma-Nólu	'to be alive'
	harÓan	'coming'	rÓ	'to come'
	hasOnáNan	'happiness'	sÓnan	'to be happy'
	halONáNan	'miracle'	lÓnan	'to be astonished'
	habiáran	'fear'	ma-bíar	'to be afraid'

2. ha-...-on when the underlying form is either (a) an adjective stem, or (b) a non-conjugated verb stem, or (c) a non-conjugated verb base:

(a)	hamalÓon	'skill'	malÓ	'skillful'
	hapogósOn	'poverty'	pogós	'poor'
	haulíOn	'beauty'	ulí	'beautiful'
	hapOrsúkOn	'misfortune'	pOrsúk	'unfortunate'
	hapOsÓOn	'youth'	pOsÓ	'young'
	hajahátOn	'crime'	jahát	'wicked'
(b)	halojáOn	'fatigue'	lÓja	'to be tired'
	hagabéOn	'prosperity'	gábe	'to be prosperous'
	hamarsákOn	'sadness'	m-ársak	'to be sad'
(c)	halÉOn	'starvation'	lE	'hunger' (verb stem
			ma-lÉ	'to be hungry')

The morpheme whose meaning is 'location' is represented by the following affixes:

1. ha-...-an when the underlying form is a non-conjugated verb base:

hatubúan	'birth place'	túbu	'to be born'
habiccáran	'east'	bíccar	'to rise (of the sun)'
hasuddútan	'west'	súddut	'to set (of the sun)'
hajONjÓNan	'standing position'	jÓNjON	'to stand'
hapEákan	'lying position'	pEák	'to lie'

2. par-...-an when the underlying form is either (a) a non-conjugated verb base, or (b) a noun stem:

(a) parbOrNínan 'inn', base bÓrNin 'night', verb stem marbÓrNin 'to stay the night'.

parburían 'bowl', base buri, verb stem marbúri 'to wash'.

paridían 'bathing place', base idi, verb stem marídi 'to bathe'.

partOnúnan 'place where weaving is done', base tOnun, verb stem martÓnun 'to weave'.

(b) pargadÓNan 'sweet potato field, place suitable for growing sweet potatoes', gádON 'sweet potato'.

paranákan 'womb', ának 'son'.

parsObbaÓnan 'place where a spirit dwells', sObbáOn 'spirit'.

pargOláNan 'wrist', gÓlan 'bracelet'.

3. paN-...-an when the underlying form is a conjugated verb stem:

panurátan 'medium on which one writes, something suitable to write on', surat 'to write'.

4. -an when the underlying form is (a) a conjugated verb stem, or (b) a non-conjugated verb base:

(a) tanÓman	'cemetery'	tanOm	'to bury'
hurúNan	'prison'	huruN	'to enclose'
paNánan	'plate'	paNan	'to eat'
usúNan	'stretcher'	usuN	'to carry'
(b) podóman	'place where one sleeps'	podom	'to sleep'
		(verb stem módom	'to sleep')

iNánan	'place'	iNan	'to dwell'
		(verb stem maríNánan)	
adían	'place of rest'	adi	'to rest'
		(verb stem marádi)	
isían	'contents'	isi	'to be filled with'
		(verb stem marísi)	
labúan	'harbour'	labu	'to drop anchor'
		(verb stem marlábu)	
huddúlan	'seat'	húddul	'to sit'
jugúkan	'seat'	júguk	'to sit'

The morpheme whose meaning is 'instrument' is represented by the following affixes:

1. paN- when the underlying form is a conjugated verb stem, e.g. panbúkkus 'the wherewithal to wrap something in', verb stem bukkus 'to wrap'; panbúr0 'scarecrow', verb stem bur0 'to scare (birds)'; paNúras 'charm used in exorcising a house', verb stem uras 'to exorcise'.
2. paN-...-an when the underlying form is a conjugated verb stem, e.g. paN0t0m 'carpenter's bench', verb stem 0t0m 'to plane'.
3. par- when the underlying form is a non-conjugated verb base, e.g. par0ppa 'garment with which one carries a child on one's back', verb base 0ppa, cf. the verb stem mar0ppa 'to carry a child on one's back'.
4. par-...-an when the underlying form is a non-conjugated verb base, e.g. parsuápan 'washing utensil', verb base suap, cf. the verb stem marsúap 'to wash (one's face)'.

A form difficult to classify is paNalúga 'oar', cf. marlúga 'to row' and parlúga 'rower'.

It may be noted that classes of underlying forms which occur with different affixal representatives of the same morpheme are not in all cases mutually exclusive. For example, the morpheme 'instrument' is represented by two different affixes (paN-, and paN-...-an) with conjugated verb stems. But it does not happen that some particular conjugated verb stem co-occurs with both those affixes with the same resulting meaning.

The following table summarises the distribution of affixes among morphemes according to the class of the accompanying underlying form. The columns represent morphemes and the rows classes of underlying forms. The form or forms appearing at the intersection of a row and a column are the affixes which represent the morpheme with that type of underlying form.

	Actor	Action	Quality	Location	Instrument
Conjugated Verb Stems	paN-	paN- paN- -an paN- -0n		paN- -an -an	paN- paN- -an
Non-conjugated Verb Bases	par-	par- par- -an	ha- -an ha- -0n	ha- -an par- -an	par- par- -an
Non-conjugated Verb Stems		ha-	ha- -0n	-an	
Adjective Stems		ha-	ha- -an ha- -0n		
Noun Stems				par- -an	

In the second group of affixes occurring in complex nouns there are, first of all, a number which have clearly defined meanings:

par- 'object distinguished by a certain position', e.g. *pargíjjaN* 'the top one' (the base *gijjaN* recurs in the adjective stem *gijjáN* 'high' and in the noun stem *gíjjaN* 'high place'), *parjólo* 'the first one' (cf. noun stem *jólo* 'front'), *parpúdi* 'the last one' (cf. noun stem *púdi* 'back, back-side'), *partóru* 'the bottom one' (cf. noun stem *tóru* 'underneath').

par- 'those related to', e.g. *parának* 'bridegroom's relations', *parbóru* 'brides's relations'.

par-...-an 'person referred to by a kin term who does not have the relationship denoted by it', e.g. *paramáNan* 'person whom one calls ámaN but who is not one's true father', *parináNan* 'person whom one calls ínaN (mother)'.

da- 'my' with kin terms only, e.g. *daámaN* (usually /*dámaN*/) 'my father', *daínaN* 'my mother', *daóppuN* 'my grandfather', *daháhaN* 'my brother, my sister' (*háhaN* 'older sibling of the same sex as ego'). But note that *daít0* (*ít0* 'sibling of the opposite sex to ego') does not occur.

-an 'object resulting from an action'. Underlying forms are conjugated verb stems, some of which are doubled roots, e.g. *bagían* 'share, part' (conjugated verb stem *bagi* 'to divide'), *pakkéan* 'clothes' (conjugated verb stem *pakke* 'to wear'), *biláNan* 'number' (conjugated verb stem *bilan* 'to count'), *suksían* 'washing, washed clothes' (conjugated verb stem *suksi* 'to wash clothes'), *pàhanpahánan* 'domesticated animal' (*pahan* 'to feed (animals)'), *sùansuánan* 'plant' (conjugated verb stem *suan* 'to plant'), *hàdaNhadáNan* 'pouch carried over the shoulder' (conjugated verb stem *hadaN* 'to carry over the shoulder'), *tòN0st0NÓsan* 'a present sent' (conjugated verb stem *t0N0s* 'to send').

The remaining affixes in the second group have no assignable meanings. They can be isolated because the underlying forms with which they appear recur elsewhere.

-an. Examples: tOrúan 'a place underneath', cf. tÓru 'underneath', bagásan 'interior', cf. bágas 'house'.

-hOn. Examples: anákhOn 'child' (cf. ának 'son'), ianákhOn 'child', with a prefix i-.

-in-. Example: sinÓddaN 'ray (of light)', cf. sÓddaN 'light'.

ni-. Examples: nípi 'dream' (conjugated verb stem ipi 'to dream'), níársik 'dish of drained fish' (conjugated verb stem arsik 'to drain'), níóli 'wife' (conjugated verb stem oli 'to marry (said of a man)').

in-. Example: indáhan 'cooked rice' (cf. the base dahan in the non-conjugated verb stem mardáhan 'to cook rice').

si-...-On. Examples: sipaNánOn 'food' (cf. the conjugated verb stem paNan 'to eat'), siinúmOn 'drink' (cf. conjugated verb stem inum 'to drink').

-On. Example: dahánOn 'uncooked rice' (cf. the base dahan in the non-conjugated verb stem mardáhan 'to cook rice').

pasi- 'the wherewithal to procure'. Underlying forms are nouns. Examples: pasi-dÉkkE 'the wherewithal to procure fish' (dÉkkE 'fish'), pasi-tibbáh0 'the wherewithal to procure tobacco' (tibbáh0 'tobacco'), pasi-bajúna 'the wherewithal to procure a shirt for him' (bajú-na 'his shirt'), pasi-kuém 'the wherewithal to buy cake for you' (kué-m 'your cake'). These nouns are matched by non-conjugated verbs with the affix masi-, see section C4 of this chapter.

4. DE-ADJECTIVAL NOUNS

To many adjectival stems there correspond derived noun stems differing from the adjectives from which they are derived in having penultimate stress. Examples: ulí 'beauty' from ulí 'beautiful', tábo 'tastiness' from tabó 'tasty', háccit 'painfulness' from haccít 'painful', gógo 'strength' from gogó 'strong'. Examples in sentences: lòNaN nasida mamÈrEN ùli ni òbukna í 'They were amazed to see the beauty of her hair', maNàNguk ala ni haccítna 'She cried out in pain', gògo ni ukkOrmu í 'What loud snoring!, The strength of that snoring of yours!'. Note especially the following use of these derived nouns: gògona í 'How strong (he is, you are, etc.)!', ùlina í 'How beautiful!'. See Chapter V, section B9 for more examples.

C. VERB MORPHOLOGY

1. INTRODUCTION

Verbs are either conjugated or non-conjugated.⁴ A conjugated verb consists of an inflectional affix and a conjugated verb stem. A non-conjugated verb consists of a non-conjugated verb stem. For instance, the conjugated verb *maNárOp* 'to hope' consists of the inflectional affix *maN-* and the conjugated verb stem *arOp*, while the non-conjugated verb *marláNE* 'to swim' consists of the non-conjugated verb stem *marlaNE*. The class of conjugated verb stems and the class of non-conjugated verb stems overlap. For example, *táNgal* 'to be loose, undone' consists of the non-conjugated verb stem *taNgal*, and the conjugated verb *manáNgal* 'to loosen, undo' consists of the inflectional affix *maN-* and the conjugated verb stem *taNgal*.

A set of conjugated verbs which share the same stem will be termed an inflection.

2. FORMATION OF VERB BASES

Most verb bases are roots. When a base is morphologically analysable it consists either of a doubled root, or of a root and a primary affix.

A non-conjugated or conjugated verb whose base consists of a doubled root has the connotation 'repeated or prolonged action'. The following are examples of doubled roots in non-conjugated stems:

<i>marhullaNhulíaN</i>	<i>'to go around in circles'</i>
<i>marmèammÉam</i>	<i>'to play'</i>
<i>margàttigátti</i>	<i>'to alternate, change places'</i>
<i>marhíllonNhíllon</i>	<i>'to sparkle, twinkle'</i>
<i>dìadiáOn</i>	<i>'to be undecided'</i>
<i>bàrsibarsíOn</i>	<i>'to sneeze'</i>
<i>mÈkkElÉkkEl</i>	<i>'to laugh'</i>
<i>mÒkkOlÓkkOl</i>	<i>'to cough'</i>

The following are examples of doubled roots in conjugated stems:

<i>ihutihut</i>	<i>'to follow around'</i>
<i>tOmutOmu</i>	<i>'to go out and meet repeatedly'</i>
<i>pikkirpikkir</i>	<i>'to ponder over'</i>
<i>aNgOaNgOi</i>	<i>'to sniff at'</i>
<i>ihutihuti</i>	<i>'to follow around'</i>

pikkirpikkirh0n *'to ponder over'*

pabErENbErEN *'to watch'*

All examples of primary affixes in conjugated verbs are either in intensive or in circumstantial stems. The following primary affixes occur: ha-, ta-, tar-, parsi-, paN-. Examples:

habiari *'to be afraid of'*

hapOrsEai *'to believe'*

hariNgash0n *'to do with zeal'*

hasogoh0n *'to dislike'*

tabunih0n *'to hide'*

tariN0ti *'to recall, remind'*

paNhuliNi *'to speak to'*

parsiajari *'to learn'*

The following primary affixes occur in non-conjugated verbs: ta-, tar-. Examples of non-conjugated stems containing primary affixes:

martabúni *'to hide (intransitive)'*

marsitaríN0t *'to recall the past'*

3. CONJUGATED VERB STEMS

Conjugated verb stems are either base stems or derived stems. A base stem consists entirely of a base, a derived stem consists of a base and a derivational affix.

Three such derivational affixes appear in conjugated verb stems. They are the intensive, the circumstantial, the causative affixes, with the morphophonemic shapes -i, -h0n, and pa- respectively. A derived stem which contains an intensive affix is termed an intensive stem, one which contains a circumstantial affix a circumstantial stem, and so forth. The following are examples of conjugated stems:

base stem	gadis	<i>'to sell'</i>
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intensive stem	g0ar-i	<i>'to name'</i>
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circumstantial stem	g0bbar-h0n	<i>'to describe'</i>
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causative stem	pa-balga	<i>'to enlarge'</i>
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Intensive and circumstantial stems may be extended by the addition of the plural affix, which has the morphophonemic shape paN-. Stems which contain this affix are termed plural stems. Examples follow: pan-putikh0n

'to pluck', pan-pEakhOn 'to lay down', pan-daNgurhOn 'to throw about', pan-bukkusi 'to wrap', pan-boani 'to bring', pan-buati 'to take'. Plural stems co-occur only with first passive affixes, e.g. dipanboàni *ibàna akka gìlokgìlok tu jábu* 'He brings insects into the house (repeatedly)', dipanputìkhOn akka dakdànak d0 akka búNa 'The children were picking flowers', dipanpEàkhOn d0 baràNna disón 'His things had been left lying about'.

This is, therefore an example of stem-to-stem derivation: putikhOn and pan-putikhOn, for instance, are both conjugated verb stems. It is not clear whether all intensive and circumstantial stems can be extended in this way.⁵

The meanings of the derivational affixes can best be approached by way of the meanings of the resultant stems. Two situations can be distinguished. In the first there is some specifiable semantic difference between a derived stem and the corresponding base stem, or between two derived stems which have the same base but different derivational affixes. In the second situation the derived stem is not matched by a corresponding base stem or by another derived stem containing the same base.

Examples of the first type of meaning difference are as follows:

a. Intensive stems compared with the corresponding base stems have the meaning 'repeated or prolonged action'. Thus from the base daNgur there are two stems daNgur 'to throw (once)' and daNgur-i 'to throw (repeatedly)'. The following pairs of stems are further examples of the same meaning relation:

bolus-i 'to pass by several times, to pass to and fro in front of' : bolus 'to pass by (once)', bErEN-i 'to look round at, gaze at' : bErEN 'to look at', sEat-i 'to cut (and in doing so carry out several movements, e.g. cutting bread)' : sEat 'to cut (and carry out only one movement, e.g. cutting a piece of string)', pONgOl-i 'to break off (several things, e.g. twigs on a tree)' : pONgOl 'to break (carrying out only one movement)', pikkiri 'to ponder over' : pikkir 'to think'.

b. There are instances of an intensive stem having the connotation 'repeated action' and being matched by a circumstantial stem from the same base: karejo-i 'to do (several times)' and karejo-hOn 'to do (once)', putik-i 'to pluck (several times)' and putik-hOn 'to pluck (one thing)'.

Other similarly related stems show no consistent semantic distinction. They are the following: ajar-i 'to teach (a person)' and ajar-hOn 'to teach (something)', ul0s-i 'to cover with a blanket' and ul0s-hOn 'to cover up'.

No general statement can be made to account for the meaning of circumstantial stems as compared with the corresponding base stems: lakka-h0n 'to take a step' : lakka 'to walk', d0k-h0n 'to tell (someone to do something)' : d0k 'to say', dap0t-h0n 'to go to meet' : dap0t 'to find', jou-h0n 'to shout (something)', sabur-h0n 'to scatter' : sabur 'to sow', p0Ng0l-h0n 'to destroy by cutting (e.g. a bamboo bridge)' : p0Ng0l 'to cut', udduk-h0n 'to bend (the head)' : udduk 'to nod', ipi-h0n 'to dream of (someone)' : ipi 'to dream (something)'.

Examples of the second type of meaning relation are as follows:

Intensive stems: alus-i 'to answer', poda-i 'to advise, instruct', datdat-i 'to continue', suNgul-i 'to wake up (transitive)', lulu-i 'to look for', olo-i 'to obey', duNo-i 'to wake up (transitive)', s0ddaN-i 'to illuminate', suddat-i 'to prevent', attus-i 'to understand', lEa-i 'to slander', naEk-i 'to mount (a horse)', iNan-i 'to inhabit', haliaN-i 'to surround', d0Nan-i 'to keep (someone) company', ulak-i 'to return', j0n0k-i 'to approach', ubat-i 'to cure', urup-i 'to help', laNE-i 'to cross by swimming', dalan-i 'to tread (a path)', mula-i 'to begin'. No general statement can be made to account for the meaning of these stems. The bases exemplified in them recur for the most part in noun stems and in non-conjugated verb stems, e.g. álus 'an answer', oló-an 'agreement', sóddaN 'light', iNán-an 'place', d0Nan 'companion', góar 'name', úbat 'remedy, medicine', dálan 'way, path', múla 'beginning', tar-súNgul 'to wake up (intransitive)', dúNo 'to wake up (intransitive)', náEk 'to ascend', m-úlak 'to go back, return', mar-láNe 'to swim'.

Circumstantial stems: taru-h0n 'to bring', taNi-h0n 'to listen to', usE-h0n 'to spill', EddE-h0n 'to sing (something)', jadi-h0n 'to cause (someone to do something)', jajji-h0n 'to promise', togi-h0n 'to urge', guru-h0n 'to learn', mata-h0n 'to keep an eye of, observe', buni-h0n 'to hide', ta-buni-h0n 'to hide', pira-h0n 'to lay (an egg)', pEak-h0n 'to place', lua-h0n 'to make off with', tahuak-h0n 'to crow (something)', t0ttu-h0n 'to lay down (laws, etc.)', tubu-h0n 'to bear (a child)'. No general statement can be made to account for the meanings of these stems. The bases exemplified in them recur for the most part in noun stems and in non-conjugated verb stems, e.g. ÉddE 'song', gúru 'teacher', máta 'eye', píra 'egg', mar-t-in-áNi 'to be able to hear', mar-usÉ-an 'to spill over (intransitive)', jádi 'to become', mar-jájjj 'to make a promise', mar-gúru 'to learn', mar-tahúak 'to crow', túbu 'to be born'.

The meaning of the causative affix is 'to cause something to be, to make someone or something be'. Most of the bases which appear in causative verbs recur in adjectives or in non-conjugated verbs. Examples of causative stems whose bases recur in adjectives: pabEkkuk 'to bend' :

bEkKúK 'bent', paNaNa 'to open' : NaNá 'open', palabbat 'to slow down' : labbát 'slow', pahojot 'to do quicker' : hojót 'fast', pabukka 'to open' : bukká 'open', parEtta 'to put in order' : rEtta 'in order', pat0lt0l 'to stretch out stiff' : t0lt0l 'stiff and outstretched', pabalga 'to enlarge' : balgá 'large', pah0h0m 'to silence' : h0h0m 'silent', pahEbbaN 'to spread out' : hEbbáN 'spread out'.

Examples of causative stems which recur in non-conjugated verbs: pasiduN 'to finish (something)' : síduN 'to have done, to have finished', patiddaN 'to stand (something) up' : tíddaN 'to be standing', palua 'to free' : malúa 'to be free', pasaut 'to put into effect' : sáut 'to succeed', pamatE 'to kill' : máte 'to die', pat0lhas 'to carry out' : tólhas 'to go into effect', pabON0t 'to take inside' : bÓN0t 'to go inside', pajONjON 'to stand (something) up' : jÓNjON 'to be standing', panaEk 'to promote' : náEk 'to rise'.

4. FORMATION OF NON-CONJUGATED VERB STEMS

Non-conjugated verb stems are either base stems or derived stems. A base stem consists of a base, a derived stem consists of a base and a derivational affix.

It may be noted that a restricted set of base stems have stress on the final syllable. They are the following: dabú 'to fall', tiNgáN 'to fall', tuNgalín 'to topple over', pEák 'to lie', ragÉ 'to lie about (of corpses)'.

Other examples of base stems follow: bórhát 'to depart', hábaN 'to fly', húddul 'to sit', lúpa 'to forget', lóNaN 'to be surprised', láo 'to go', lílu 'to lose one's way', mása 'to take place', másak 'to be ripe', másuk 'to arrive', bÓN0t 'to go in', nákkOk 'to climb, ascend', ró 'to come', sáhat 'to arrive', sálpu 'to elapse', só 'to stop, halt', síraN 'to get divorced', súddut 'to set (of the sun)', bíccar 'to rise (of the sun)', táNis 'to weep', péut 'to fall', lója 'to be tired', sála 'to be wrong, mistaken', tónu 'to be wet', NÚNu 'to be dumb', lónON 'to sink', múruk 'to an angry', rúar 'to come out', túbu 'to be born', laláEn 'to be mad', náEk 'to rise, ascend', túat 'to climb down', jÓNjON 'to stand'.

A great variety of derivational affixes occur in non-conjugated verb stems. Many of them occur in few stems and have no clearly assignable meanings. The following affixes occur with reasonable frequency and have identifiable meanings:

mar-...-an 'plural or mass subject'. Underlying forms are either (1) non-conjugated verb stems, or (2) adjective stems. Examples of (1): mar-modóm-an 'to sleep' (the underlying form here is módom, a non-conjugated verb stem, of which podom is the underlying form, i.e. the

base), mar-salá-an 'to be wrong' (sála 'to be wrong'), mar-habáN-an 'to fly' (hábaN 'to fly'), mar-sONgÓp-an 'to alight' (sÓNgOp 'to alight'), mar-bukkás-an 'to move house' (búkkas 'to move house'), mar-mulák-an 'to return' (múlak 'to return'). Examples of (2): mar-pONgÓl-an 'to be broken' (pONgÓl 'to be broken'), mar-t0lt0l-an 'to be stiff' (t0lt0l 'to be stiff'). One informant distinguished between hábaN 'to be flying, i.e. to be in the air' and mar-habáN-an 'to fly off, take off in flight'.

masi-...-an 'reciprocal action'. Underlying forms are conjugated verb bases. Examples: masi-daNgúr-an 'to throw things at one another' (daNgur 'to throw'), masi-bErÉN-an 'to look at one another' (bErEN 'to look at'), masi-bodíl-an 'to shoot at one another' (bodil 'to shoot at'), masi-attús-an 'to understand one another' (attus-i 'to understand'), masi-lelé-an 'to chase one another' (lele 'to chase'), masi-joú-an 'to call one another' (jou 'to call'), masi-ummá-an 'to kiss one another' (umma 'to kiss'), masi-hElá-an 'to insult one another' (hEla-i 'to insult').

masi- 'individual action by each of two or more persons'. Underlying forms are conjugated verb stems. Examples: masi-jóu 'to call' (jou 'to call'), as in masi-jòu anák-na d0 nasida 'Each of them called his son', masi-búat 'to take' (buat 'to take'), as in masi-bùat bodíl-na d0 halak 'Each of them took his rifle', masi-hahÓlON 'to love' (hahOlON-i 'to love') as in masi-hahÒlON anák-na bé ma hita 'Let each of us love his son'.

masi- 'to procure, obtain, buy'. Underlying forms are nouns. Examples: masi-napúran 'to procure betel', masi-hÓtaN 'to obtain rattan', masi-bajún-hu 'to procure a shirt for me, myself', masi-bajú-na 'to procure a shirt for himself, for him'. Noun phrases are also permissible as underlying forms: masi-bàju-na-bíron 'to procure a black shirt', masi-tòlu-hÓrb0 'to get three buffaloes'. These verbs are matched by derived nouns with the affix pasi-, e.g. pasi-tibbáh0 'the wherewithal to buy tobacco', pasi-haúma 'the wherewithal to acquire a rice field', pasi-gadÓN-hu 'the wherewithal to enable me to buy sweet potato'. See section B3 of this chapter. (p.62).

mar-...-in- 'to be capable of'. Underlying forms are conjugated verb bases. Examples: mar-t-in-áNi 'to be able to hear' (cf. conjugated verb stem taNi-hOn 'to listen to'), mar-b-in-egé 'to be able to hear' (bege 'to hear').

mar- 'possessing a quality temporarily'. Underlying forms are adjectival stems. Examples: mar-bíron 'to be black', mar-tíkk0 'to be round' (tikko 'round').

mar- 'to call someone by a kin term'. Underlying forms are noun stems. Examples: mar-ákkaN 'to call someone ákkaN' (ákkaN 'older sibling of the same sex as ego'), mar-ít0 'to call ít0 (ít0 'sibling of the opposite sex to ego').

mar- 'to have'. Underlying forms are noun stems. Examples: mar-mánuk 'to have a chicken' (mánuk 'chicken'), mar-hóda 'to have a horse' (hóda 'horse'), mar-bóru 'to have a daughter', mar-búkkus 'to have a wrapper' (búkkus 'a wrapping').

Other affixes appearing in non-conjugated verb stems have no clearly assignable meanings. They can be isolated because the underlying forms they appear with recur elsewhere. Examples follow:

mar-. Underlying forms are either (1) verb bases, or (2) noun stems. Examples of (1): mar-báda 'to quarrel', mar-láNE 'to swim', mar-báb0 'to weed', mar-dáhan 'to cook rice', mar-jájji 'to agree', mar-bágas 'to marry', mar-ádi 'to rest', mar-aúaN 'to bark', mar-píkkir 'to think', mar-búri 'to get washed', mar-búru 'to go hunting', mar-húsip 'to speak in a whisper', mar-gulása 'to wallow', mar-ÉtON 'to count, add up'.

Examples of (2):

margúna	'to be of use'	gúna	'use'
marsikkÓla	'to go to school'	sikkÓla	'school'
margúru	'to learn'	gúru	'teacher'
marÓnan	'to go to market'	Ónan	'market'
marrÓha	'to be conscious'	rÓha	'disposition'
mardálan	'to travel'	dálan	'path, way'
marújuN	'to come to an end'	újuN	'end'
marísap	'to smoke'	ísap	'smoke'
marjamfta	'to preach'	jamfta	'sermon'
marnapúran	'to chew betel'	napúran	'betel'
marsátur	'to play chess'	sátur	'chess'
marháta	'to speak'	háta	'word'
marsáhit	'to be sick'	sáhit	'disease'
margÓar	'to be called'	gÓar	'name'
martÓnun	'to weave'	tÓnun	'loom'
marápi	'to burst into flame'	ápi	'fire'

mar-. Underlying forms are verb bases which are either simple roots or doubled roots. Such verbs generally have an onomatopoeitic flavour. Examples: mar-NiNíN 'to ring', mar-sisíR 'to stand on end', mar-liNík 'to squeal, yelp', mar-sasák 'to gush', mar-latáN 'to make a knocking sound', mar-dobóm 'to thud', mar-labáp 'to bump', mar-litìN-litíN 'to clink', mar-latàk-laták 'to crackle', mar-liNìk-liNík 'to squeak'.

ma-. Underlying forms are verb bases. Examples: ma-pítuN 'to be blind', ma-tútuN 'to burn (intransitive)', ma-Nólu 'to live', ma-rúrus 'to fall out', ma-súak 'to break off', ma-tós 'to break, snap', ma-búgaN 'to be wounded', ma-pórus 'to flee', ma-gúrbak 'to swell', ma-híaN 'to be dry', ma-dékdek 'to fall', ma-bóla 'to break in two (intransitive)', ma-tóras 'to become ripe', ma-gódaN 'to grow up', ma-ráppiN 'to be loose', ma-NúNu 'to be dumb'.

m-. Underlying forms are verb bases. Examples: m-ÉkkEl 'to laugh', m-ÓkkOl 'to cough', m-áup 'to float', m-íjur 'to descend', m-úlak 'to return', m-ágO 'to get lost', m-ársak 'to be sad', m-ÉNgE 'to be soaked', m-úppat 'to have fallen out', m-úbbaN-úbbaN 'to float', m-ÓngOp 'to hide (intransitive)', m-áup 'to float', m-úlak-úlak 'to return (repeatedly)'.

marsi-. Underlying forms are verb bases. Examples: marsi-àjar 'to study, learn', marsi-húddul 'to ride (a horse)', marsi-tíjur 'to spit', marsi-tabúni 'to hide (intransitive)' (base tabuni, root buni).

tar-. Underlying forms are verb bases. Examples: tar-baríta 'to be famous', tar-súNgul 'to wake up (intransitive)' (cf. the conjugated verb suNgul-i 'to wake up (transitive)'), tar-lóNaN 'to be astonished' (cf. the non-conjugated verb lóNaN 'to be astonished'), tar-túra 'to cut oneself' (cf. the conjugated verb tura 'to stab'), tar-jólma 'to regain consciousness', tar-úlaN 'to lie fallow', tar-tárik 'to be drawn, attracted' (cf. the conjugated verb tarik 'to pull'), tar-hói-hoi 'to pant', tar-súga 'to step on a thorn', tar-dápOt 'to be discovered', tar-tákkup 'to be caught'.

-um-. Underlying forms are verb bases. Examples: s-um-úrut 'to retreat', j-um-ólo 'to go first', j-um-ólo 'to die', t-um-atáNis 'to weep' (base ta-taNis, root taNis, cf. the non-conjugated verb taNis 'to weep'), h-um-aláput 'to be in a hurry'.

-an. Underlying forms are verb bases. Examples: agÓ-an 'to lose something', dapót-an 'to find something', tubú-an 'to give birth', matÉ-an 'to lose (a relative)', juppáN-an 'to find something', haccít-an 'to have a pain', hodók-an 'to sweat'.

-On. Underlying forms are either (1) noun stems, or (2) verb bases. Examples of (1): lobáN-On 'to have a gap in one's teeth' (lóbaN 'gap in the teeth'), tasík-On 'to be rusty' (tásik 'rust'), batúk-On 'to cough' (bátuk 'cough'), ját-On 'to have a rash' (ját 'rash'), jOrín-On 'to suffer from a kidney complaint caused by eating jÓriN' (jÓriN 'pithecolobium bigeminum'), bukkúk-On 'to be hunchbacked' (búkkuk 'hump'). Examples of (2): bàrsi-barsí-On 'to sneeze', jàlak-jalák-On 'to search for something'.

ha-. One example: ha-rúar 'to come out' (rúar 'to come out').

pa-. Examples: pa-júppaN 'to meet', pa-túddal 'to sit back to back'.

-i. One example: mulá-i 'to begin'.

attu-...-On. One example: attu-rapár-On 'to starve'.

patu-...-On. One example: patu-rapár-On 'to starve'.

marsi-...-an. Examples: marsi-tarík-an 'to play at tug-a-war', marsi-dOppák-an 'to face one another'.

mar-...-i. Examples: mar-EddÉ-i 'to sing', mar-mEám-i 'to play', mar-badá-i 'to quarrel'.

5. INFLECTIONAL AFFIXES

An inflection is a set of conjugated verbs which share the same stem. Each member of such a set consists of a stem and an inflectional affix. There are eight verbs in an inflection, and there are consequently eight different inflectional affixes. Their morphophonemic shapes are as follows:

Imperative affix	Ø
Active affix	maN-
First passive affix No.1	di-
First passive affix No.2	hu-
First passive affix No.3	ta-
Second passive affix	tar-
Third passive affix	-in-
Fourth passive affix	-On

For the morphophonemics of the inflectional affixes see Chapter III, sections C4 and C5 (pp.39-41).

The following is a tabular survey of conjugated verbs. The stems appearing in it are the base stem gadis 'to sell', the intensive stem g0ar-i 'to name', the circumstantial stem g0bbar-h0n 'to describe', and the causative stem pa-balga 'to enlarge'. Of the three first passive

verb forms only the first, the one which contains the affix *di-*, has been quoted in the table.

	Base	Intensive	Circumstantial	Causative
Stem	gadis	g0ari	g0bbarh0n	pabalga
Imperative	gádis	g0ári	g0bbárh0n	pabálga
Active	mangádis	mang0ári	mang0bbárh0n	pabalgáh0n
1st Passive	digádis	dig0ári	dig0bbárh0n	dipabálga
2nd Passive	targádis	hag0áran	targ0bbárh0n	tarpabálga
3rd Passive	ginádis	gin0áran	gin0bbárh0n	pinabálga
4th Passive	gadís0n	g0áran	g0bbarh0n0n	pabalgah0n0n

The meaning of the imperative affix is 'peremptory command', e.g. *památE ibàna* 'Kill him!', *unaN Óbbus api ì* 'Do not blow the fire!'.

The second passive affix has the meaning 'can be done'. e.g. *sadia dáo tardaNgur h0 batu* 'How far can you throw stones?', *daN haulákan* 'It cannot be done again' (intensive stem *ulak-i* 'to do again').

The fourth passive affix has the meaning 'to be done, will be done', e.g. *dilEan nasìda d0 hìraN usùN0n ni akka amaáma* 'They gave the baskets to be carried by the men', *dib0t0 ibàna na g0àran musE dakdanak ì si gidí0n* 'She knew that the child would later be called Gideon', *hàduk boán0n* 'awkward to carry'.

In one syntactic construction the third passive has the meaning of a general injunction, e.g. *pinalúa pE manuk ì* 'The chickens should be set free'. In two other constructions, namely in relative clauses and in questions, it has no explicit connotations of tense or aspect, e.g. *hat0p ma dipaNan nasìda akka sipaNàn0n na binoanna í* 'Immediately they ate the food which she had brought', *àha na binòanmúna* 'What have you brought?'.

The active affix and the first passive affixes have no explicit connotations of tense or aspect. There is, moreover, no more than a stylistic difference between the active affix and the first passive affixes, e.g. between *dibúat* and *manbúat* in the sentences *dibúat ibàna d0 bukku í* 'The book was taken by him' and *manbúat bukku í d0 ibàna* 'He took the book'. In narrative prose verbs with passive affixes predominate over verbs with active affixes.

The first passive affixes, however, differ from the active affix in one respect: they are capable in certain cases of implying pronominal reference. Verbs containing a first passive affix occur in two syntactic constructions. In the first such a verb is immediately followed by an

agent noun phrase, while in the second construction no overt agent noun phrase occurs, and the passive affix itself conveys the meaning otherwise conveyed by an overt noun phrase.

For example, in the sentence *dibùat ibàna d0 bukku í* 'He took the book', the overt noun phrase *ibána* 'by him' functions as the agent of the passive verb *dibúat*. In the sentence *hubúat d0 bukku í* 'I took the book', on the other hand, no overt agent noun phrase occurs after the passive verb *hubúat*, but instead the first passive affix *hu-* conveys the reference to the agent 'by me'.

There are three first passive affixes: *hu-*, *di-*, and *ta-*, and correspondingly three first passive verbs in every inflection, e.g. *hubúat*, *dibúat*, and *tabúat*.⁶ These three forms are distributed in the two constructions in the following manner. In the first construction *hubúat* and *dibúat* occur, the former before *hámi* 'we (exclusive)', and the latter before *hó* 'you (singular)', *hamú* 'you (plural)', *ibána* 'he, she', *nasída* 'they', or any other noun phrase. In the second construction *hubúat* and *tabúat* occur, *hu-* with the meaning 'I', and *ta-* with the meaning 'we (inclusive)'. The following set of sentences will make this distribution clearer:

<i>hubúat d0 í</i>	'I took it'
<i>dibúat hó d0 í</i>	'You (singular) took it'
<i>dibúat ibána d0 í</i>	'He (or she) took it'
<i>dibúat rája d0 í</i>	'A rajah took it'
<i>tabúat d0 í</i>	'We (inclusive) took it'
<i>hubúat hámi d0 í</i>	'We (exclusive) took it'
<i>dibúat hamú d0 í</i>	'You (plural) took it'
<i>dibúat nasída d0 í</i>	'They took it'

In the first construction the agent noun phrase may be absent, and this is interpreted to imply a reference to 'someone', e.g. *dibúat d0 í* 'It was taken, someone took it', or to 'the afore-mentioned', e.g. *dijòu ibána ma anàkna jala didók ma* 'She called her son and (she) said'.

6. SPECIAL NON-CONJUGATED VERBS

Two verb stems *nin* 'to say' and *dap0t* 'to find' occur only before monosyllabic enclitic pronouns, e.g. *nín-hu* (phonemically /níkku/) 'I say', *nín-mu* (phonemically /nímmu/), *nín-na* 'he says', *nín-ta* (phonemically /nítta/), *dapót-hu* (phonemically /dapóttu/) 'I find', *dapót-mu* 'you find', *dapót-na* 'he (or she) finds', *dapót-ta* 'we (inclusive) find'.

The verb *ninna* 'say' occurs before the pronouns *hámi* 'we (exclusive)', *hamú* 'you (plural)', *ibána* 'he/she', *nasída* 'they', and any other noun phrase except *áu* 'I', *híta* 'we (inclusive)', and *hó* 'you (singular)'. Examples: *ninna ibána* 'he/she says', *ninna hamú* 'you say', *ninna nasída* 'they say', *ninna hámi* 'we say', *ninna amàNna* ì 'his father says'.

Three verbs *júppa* 'to meet', *júppaN* 'to meet', and *dáp0t* 'to find', behave syntactically like first passive verbs in the first of the two constructions mentioned above. Thus *dáp0t ibána d0* ì 'He found it' is parallel to *dibúat ibána d0* ì 'He took it'. They differ from first passive verbs like *dibúat* in that they can be followed by any noun phrase whatever, e.g. *dáp0t áu d0* ì 'I found it', *dáp0t hó d0* ì 'You found it', *dáp0t híta d0* ì 'We found it', *dáp0t dakdának d0* ì 'A child found it'.

7. DEFECTIVE CONJUGATED VERB INFLECTIONS

Certain conjugated verb inflections are defective, that is to say, they lack one or more forms normally associated with such inflections. A stem appearing in such an inflection will be called a **defective stem**.

The defective stem *dap0t* 'to find, meet' occurs in the following forms: *man-dáp0t*, *di-dáp0t*, *hu-dáp0t*, *ta-dáp0t*, and *ni-dáp0t*. Imperative, second passive, and fourth passive forms are lacking. Examples: *hudáp0t ibana disí* 'I found him there, I met him there by accident', *didáp0t d0 ibana manjàha di kamar í* 'He found him reading in the room', *áu d0 na mandapòtsa* 'It was I who found it', *aha dibàEn h0 tu na nidap0tm í* 'What did you do with the thing you found?'.

The defective stem *paula* 'to pretend' occurs in the following forms: imperative *paulá*, first passive *hu-paulá*, etc., third passive *p-in-aulá*. Examples: *dipaulà d0 ibana na marsáhit* 'He pretended to be sick', *hupaulà d0 au mársak* 'I am pretending to be sad', *paulà h0 na ót0* 'Pretend to be a fool'.

The conjugated verb stem *par-lEan* 'to distribute, hand out' lacks an active form. Examples: *diparlEan ibána ma ìsi ni hajutna ì tu ib0tÓna* 'He handed round the contents of his sack to his sisters', *par-lEàn-i hamù bé guguanmùna ì* 'Hand over your contributions, each one of you!'.

D. ADJECTIVE MORPHOLOGY

Adjectives consist either of a stem alone or of a stem and an affix. The former are simple adjectives, e.g. *tibbó* 'high', *balgá* 'large', *m0kmók* 'fat', *gogó* 'strong', *burjú* 'honest, polite'. The latter are derived adjectives, e.g. *g-um-ógo* 'stronger', *um-bálga* 'larger', *pa-tibbo-hú* 'too high', *uli-án* 'more beautiful'. All adjective stems occur in derived adjectives. The affixes which appear in derived adjectives are the following:

-um- 'more'. Examples: sumÓnaN 'happier', humícca 'more cheerful', lumás 'hotter', uppír 'harder', ummÓkmÓk 'fatter', umbódo 'more stupid'. The corresponding simple adjectives are sÓnaN 'happy', hiccá 'cheerful', lás 'hot', pír 'hard', mÓkmÓk 'fat', bodó 'stupid'.

-an 'more'. Examples: maluaán 'freer', ulián 'more beautiful'.

-um-...-an 'more'. Examples: gumokán 'fuller', ummulián 'more beautiful', dumeNganán 'better', humalusán 'finer'.

pa-...-hu 'too'. Examples: pagogohú 'too strong', paulihú 'too beautiful', parÓahú 'too ugly', pamEtmEthú 'too small', pabalgahú 'too large', pahojothú 'too fast', parahishú 'too steep'.

One adjective stem is analysable into a root and a primary affix, namely in-barú 'new'. The root baru recurs in the compound noun tà0n-báru 'New Year'.

For the stress patterns characteristic of adjectives see Chapter III, section C7, p.43.

E. NUMERALS

The cardinal numerals are as follows: sáda 'one', dúa 'two', tólu 'three', Ópat 'four', líma 'five', Ón0m 'six', pítu 'seven', wálu 'eight', sía 'nine', san púlu 'ten'. The cardinal numerals from eleven to nineteen are formed by means of san púlu followed by sáda, dúa, and so forth, e.g. san púlu Ón0m 'sixteen'. The other tens are formed by means of púlu preceded by dúa, tólu, and so forth, e.g. pítu púlu 'seventy', òn0m púlu sía 'sixty nine'. The morphemes rátus 'hundred', ríbu 'thousand', lóksa 'ten thousand', and júta 'million' occur preceded by sá 'one', dúa 'two', etc., sa rátus 'one hundred', líma ríbu 'five thousand', sa lóksa 'ten thousand'.

The morpheme sáda functions as an optional indefinite article, e.g. dibÈrEN ma sàda Óbbun 'She saw a cloud', adÒN ma sàda amaàma na mapítuN 'There was a blind man', adÒN d0 sàda biàNna d0h0t hutíNna 'He had a dog and a cat', rò d0 panàkk0 manákk0 mutiha ì 'A thief came and stole the pearl', nùNna adÒN di ganup nasìda sada be rábi 'They each had a knife', nùNna adÒN di ganup nasìda rábi 'They each had a knife'.

The shorter form sa 'one' occurs, as we have seen above, before rátus 'hundred', ríbu 'thousand', lóksa 'ten thousand', and also, with the nasal extension -n, before púlu 'ten'. It is also regularly used in measure constructions, e.g. san sÓdduk 'one spoonful' (for other examples see Chapter III, section C3, p.38), and in many other common expressions, e.g. sa búlan 'one month', sa hálak 'a person, somebody' (as in sa hàlak namarbáju 'a girl', sa hàlak amaáma 'a man', sa hàlak dolidóli

'a young man', sa hálak sian nasida 'one of them'), dina sa háli 'once upon a time' (but dina sada árl 'eines Tages'), sa háli 'once, une fois', sa Otík 'a little', sa tókkin 'one minute', sa bátu 'one kilometer', sa par-Ópat 'one quarter'.

Ordinal numerals contain pai- or pa-...-h0n, e.g. pai-dúa and pa-duá-h0n 'second', pai-tólu and pa-tolú-h0n, and so forth, but pai- is not attached to numerals higher than nine, hence pa-san-pùlu-sadá-h0n 'eleventh', not *pai-san-pulu-sada, pa-sa-ribú-h0n 'one thousandth', and so forth. Note par-jólo 'first'.

Fractions contain par-, e.g. dùa par-líma 'two fifths', tòlu par-Ópat 'three quarters'.

N O T E S

1. For Van der Tuuk's discussion of this type of noun see *Tobasche Spraakkunst* (1864-67), paragraphs 152, 2. Compare also Silitonga's remarks (1973:122, and following).
2. This type of phrasal noun is briefly discussed by Van der Tuuk (1864-67, paragraph 167).
3. This analysis of complex nouns differs from Van der Tuuk's. See in particular his discussion of what he calls 'nominal forms' (1864-67, paragraph 99) and 'derived substantives' (1864-67, paragraph 120). His treatment of nouns such as *pargúru* 'pupil' is in essence a transformational one. He derived *pargúru* from the corresponding verb *margúru* 'to learn' by means of a replacement rule (m being replaced by p). But this does not account for such forms as *parmátE* 'death' (from *mátE* 'to die', not **marmatE*). His analysis has the virtue of emphasising the relation between verbal nouns and the verbs from which they are derived. In this way he is able to account for such syntactic structures as *panàkk0 mutiha í* 'the person who stole the pearl' (verb stem *takk0* 'to steal') and *pamùnu ràja í* 'the murderer of the rajah' (verb stem *bunu* 'to kill'), in which a verbal noun is followed immediately by a noun phrase instead of an instance of the *ni*-construction (contrast *pangàtti ni ràja í* 'the successor of the rajah').
4. The treatment of verb morphology offered here differs from Van der Tuuk's in that I do not consider passive verbs to be noun-like; see *Tobasche Spraakkunst* (1864-67), paragraphs 37-96, 100-119. Van der Tuuk's notion that passive verbs are nominal forms is motivated in paragraph 63, note (page 126 of the Dutch edition, page 123 of the English translation). Essentially he argues that a passive verb such

as *di-súrat* 'is written' is more similar morphologically to the noun *súrat* 'letter' than to the active verb *ma-núrat* 'to write'. But from the mere fact that stems do not undergo the same morphophonemic changes after the affix *di-* as they do when they occur after the affix *maN-* no such sweeping conclusions can be drawn. It may be noted also that Van der Tuuk classifies active verbs and non-conjugated verbs strictly according to the shape of their affixes. Thus he puts the second passive of a conjugated verb (e.g. *tar-búat* 'can be taken') in the same verb class as a non-conjugated verb such as *tar-begé* 'to come to (someone's) knowledge' (see *Tobasche Spraakkunst* (1864-67), paragraph 109). In general he fails to distinguish explicitly between conjugated and non-conjugated verbs. This is not to say, of course, that he was unaware of the difference between them, but contrast his approach with Hazeu's lucid description of the Gayo verb (1907:XIV).

5. See Nababan 1966:30f, Warneck 1906 under peak (Warneck-Winkler, page 181), Van der Tuuk 1964-67, paragraphs 117-18.

6. Van der Tuuk (1864-67, paragraph 104) describes a fourth first passive affix *da-*, which he calls the *poda*-passive affix (from *poda* 'instruction'). These forms are used only in the special literature dealing with magic and divination. The meaning of *da-búat* was 'let it be taken'. In colloquial speech the third passive (*binúat*) was used instead.

CHAPTER V

SYNTAX

A. INTRODUCTION

In the terminology used here the basic syntactic unit is the **sentence**. A sentence is a sequence of one or more **clauses**. A sentence which contains only one clause will be termed **simple**, one which contains more than one clause will be termed **complex**. In a complex sentence at least one clause is a **principal clause**. A simple sentence consists entirely of a single principal clause. Principal clauses are either **declarative**, **interrogative**, or **imperative**. The structure of declarative principal clauses provides a convenient basis for the description of all other sentence types. Accordingly this chapter will first treat declarative principal clauses (section B), then interrogative principal clauses (section C), imperative principal clauses (section D), complex sentences (Section E), and finally sentence fragments (Section F).

B. PRINCIPAL CLAUSES

1. PREDICATE TYPES

A principal clause consists of two constituents: a **subject** and a **predicate**. For example, the sentence s0rdák d0 pittu ì '*The door is locked*' consists of a single principal clause of which the sequence s0rdak d0 '*is locked*' constitutes the predicate, and the sequence pittu ì the subject. The predicate precedes the subject.

In conversational style an isolated principal clause is often introduced by the sentence-particle na. For example, the sentence na huída d0 jabumúna '*I happened to see your house*' consists of the principal clause huída d0 jabumúna '*I saw your house*' preceded by the particle na. The presence of the introductory particle seems to add vividness to the

utterance of the sentence. Further examples: na matÉan d0 nasida '(The reason is) they have had a death in the family', na mùlak tu jabú d0 ibàna 'He is going home (i.e. is now on his way)', na malÈ hámi 'We are hungry', na paulìh0n jábu d0 hàmi 'We are building a house', na rò d0 sogòt hap0rsùk0n na bólon 'A big disaster will surely come soon', na paimaimáh0n ibàna d0 àu 'I am waiting for him'.

In all other respects a principal clause introduced by na has the same syntactic structure as one which lacks this introductory particle. For instance, na malÈ hámi 'We are hungry' contains a subject hámi 'we', preceded by a predicate malÈ 'hungry'.¹

A predicate is either verbal or non-verbal. A verbal predicate contains a verb as one of its constituents. For example, the sentence nùNna lá0 ibàna 'He has already gone' has a predicate nùNna lá0 which contains the verb lá0 'go'. In the sentence di hùta hián d0 àu 'I have been in the village before', on the other hand, the predicate di hùta hián d0 'previously in the village' consists of the predicate satellite hián 'previously' and the adverbial phrase di hùta 'in the village', but no verb.

A verbal predicate is either intransitive or transitive. An intransitive predicate consists of a verb phrase containing an intransitive verb, e.g. marúrus d0 obùkna 'His hair is falling out'. Here the predicate marúrus d0 'is falling out' contains the intransitive verb marúrus 'to fall out'. Intransitive predicates do not contain objects or agents.

A transitive verbal predicate is either active or passive. An active transitive predicate contains an active verb followed by an object noun phrase, e.g. mamì0 anakhónna d0 ibàna 'She has called her children'. Here the predicate contains the active verb mamí0 'to call' (root pi0) and the object noun phrase anakhón-na 'her children'. The term active predicate will mean an intransitive predicate or an active transitive predicate.

A passive transitive predicate contains a passive verb followed by an agent noun phrase, e.g. dibÈrEN ràja í d0 sada ílik 'The rajah saw a lizard'. Here the predicate consists of the passive verb dibÈrEN 'was seen' followed by the agent noun phrase ràja í 'by the rajah'. The agent noun phrase may be deleted, e.g. nuNna diuras bE jábu òn 'This house has already been exorcised'. In this sentence the passive verb in the predicate (diúras 'is exorcised') is not followed by an agent, as it is, say, in the sentence nuNna diúras ibàna jabu òn 'He has already exorcised this house'. It is the fact that agent noun phrases are freely deletable in passive predicates which makes the traditional term passive an appropriate one for referring to such predicates and the verbs contained in them.

The subject in a principal clause is a noun phrase, e.g. nuNNa marbúNa maNgaNàmi 'Our mango tree has blossomed' (subject maNga-námi 'our mango tree'). The object in a principal clause containing an active transitive predicate is likewise a noun phrase, e.g. maNeàti rÓti dO àu 'I am cutting bread' (object rÓti 'bread'). An agent is a plain noun phrase if the verb which precedes it is a first or second passive, e.g. dibòtO ràja í dO ì 'The rajah knew this' (agent ràja í 'the rajah'), daN tarbÈrEN nasída hau í 'They could not see the tree' (agent nasída 'they'). After a third or fourth passive verb the agent noun phrase is preceded by ni and constitutes what will be termed a ni-construction (see section B11, pp.97-98). Examples dilulúi ibàna ma na tinubùhOn ni jòlmana í 'He searched for what his wife had given birth to' (third passive verb tinubùhOn 'was given birth to' followed by the agent ni jòlmana í 'by his wife'), dipaNìdO ibana asa takkúpOn ni tuNganEdolína sada úrsa 'She asked that her husband might catch a stag' (fourth passive verb takkúpOn 'to be caught' followed by the agent ni tuNganEdolína 'by her husband').

Non-verbal predicates consist of one of the following: a noun phrase, an adjectival phrase, or an adverbial phrase. In gúddur dO ì 'It's a gourd', the predicate consists of the noun phrase gúddur 'a gourd'. In di médan dO ibàna 'He's in Medan', the predicate consists of the adverbial phrase di medan 'in Medan'. In nián dO ibàna 'She's thin', the predicate consists of the adjectival phrase nián 'thin'.

2. PREDICATE PARTICLES

There are two predicate particles: dO and ma.² They appear finally in the predicate, or before the subject in discontinuous predicates, e.g. marbíron dO taNànhu 'My hands are filthy' (predicate marbíron dO 'are filthy'), maNúllus dO alògo 'The wind blew' (predicate maNúllus dO 'blew'), lào dO ibàna tu húta 'He went to the village' (predicate lào dO...tu húta 'went to the village'), ìkkOn marláNE dO hàmi 'We shall have to swim' (predicate ìkkOn marláNE dO 'shall have to swim').

In sentences with an initial adverbial phrase the predicate particle occurs immediately after the adverbial phrase, e.g. halús dO ibàna manhatàì 'He speaks beautifully', hatòp ma harùar inanta ì sian jábu 'Straightway the old woman came out of the house'.

Neither predicate particle occurs if any of the following appears in the predicate: dán 'not', únaN 'do not', núNNa 'already', Ná 'already', dOpE 'still, yet', pE 'in future', bE 'any more'. Examples: dàn rOá sOaràna 'His voice is not bad', dàn tarúsuN au òn 'I cannot carry this', dàNhEa hupákke ì 'I never use it', únaN búnu àu 'Do not kill me!', núNNa sÓhOt ibàna 'He is already married', Nà mátE api ì 'The fire has already

gone out', di jábu dOpE ibàna 'He is still at home', hupatúdu pE dàlan 'I will show you the way', dàN tarfda bE 'It could no longer be seen'.

ma, rather than d0, occurs under the following conditions:

- (1) in principal clauses of sentences forming part of a connected narrative.
- (2) in a principal clause in which the predicate contains an attributive adjective, e.g. na pádde ma hò 'How clever you are!', na tábo ma òn 'How tasty this is!'. In such sentences replacement of ma by d0 results in a difference of meaning: na pádde d0 hò 'You are clever', na tábo d0 òn 'It is tasty'.
- (3) in imperative sentences, e.g. marhóbas ma hò 'Please get ready!' (cf. marhóbas hò 'Get ready!'), tOrús ma h0 mardàlan 'Keep straight on!', láo ma hìta 'Let us go!', gàdis hamú ma ì 'Please sell it!'.
- (4) in an isolated antecedent to a conditional sentence, e.g. aut sura disí ma àu 'If only I had been there!', aut boi ma nian mùlak àu tu hutánhu 'If only I could go back to my village!', aNgìat ma ró ibàna 'If only he would come!'.

The particle d0 is, however, not excluded from context (1), though it occurs there less frequently than ma. Principal clauses which form part of isolated statements (not connected discourse) tend to contain d0 rather than ma. In connected discourse of a non-narrative type the principle clauses frequently contain no predicate particles.

In questions d0 and the absence of a particle are equally frequent, e.g. b0àsa mùlak h0 nuàEN 'Why are you going back now?', p0rìú d0 0n di hò 'Do you need this?', ìsE d0 si t0p0t0nta disì 'Whom are we to visit there?', (also ìsE si t0p0t0nta disì).

d0 occurs after the preposed subject in topicalised sentences, e.g. ibána d0 na bàsa 'He's the one who is polite', as also does ma, e.g. áu ma marbàb0 'I'll do the weeding'.

In performative utterances d0 is not used. Thus h0l0N r0hànhu di hò 'I love you' is a declaration of love, while h0l0N d0 r0hànhu di hò 'I love you' is a statement of fact.³

3. PREDICATE SATELLITES

Predicate satellites are constituents of the predicate which occur in various positions relative to the other constituents of the sentence.

In sentences in which a predicate particle is excluded the following predicate satellites occur: dÁN 'not', núnNa 'already', Ná 'already', bE 'already, any more', dOpE 'still' pE 'in future, surely'. Of these the first three occur sentence-initially and the others in the same position

as the predicate particles appear, i.e. between the predicate and the subject. Co-occurrence restrictions among predicate satellites are as follows: bE must co-occur with either dǎN or núNNa (in imperative sentences with únaN 'do not'), dOpE may co-occur with dǎN, pE does not co-occur with either dǎN or núNNa, satellites which appear in the same sentence position do not co-occur (hence dǎN does not co-occur with núNNa). Examples follow:

dǎN 'not': dǎN malÓ ibàna 'He is not clever', dǎN ró hamù marsògot 'Aren't you coming tomorrow?', dǎN ráuthu òn 'This is not my knife', dǎN di jábu ibàna 'He is not at home', dǎN dífda nasìda hàmi 'They did not see us', dǎN dibòtO ibàna marhàta bátak 'She cannot speak Batak', dǎN huìNot gOàrmúna 'I do not recall your name', dǎN pòla ròá sOarána 'Her voice isn't so bad', dǎN hEa lója ibàna 'He is never tired', dǎN sadia péjet aEkgodan ì 'The river is not very shallow', dǎN di manaNdía hubÈrEN 'I could not see it anywhere', dǎN adÒN ulaónhu 'I have no work', dǎN adÒN obùkna nàNgO sáda pE 'He does not have a single hair', dǎN lOmò rOhànhu mamÈrEN úlok 'I do not like to see snakes', dǎN pOrlú làO au 'There is no need for me to go'.

núNNa 'already': núNNa múli ibàna 'She is already married', núNNa mùppat ipónhu 'My teeth have already fallen out', núNNa dibòto ibana martugáran 'He can already creep', núNNa màccai bagás aEk òn 'This water is already very deep', núNNa súddut mataniári 'The sun has already set', núNNa dápOt au hò 'I have found you', núNNa sàlpu sa míngu duN panhataìOnnasida í 'A week had already elapsed since their conversation', núNNa dapóthu bE 'I have already found it', núNNa ditòNòs hO súrat tu natOrasmu í 'Have you already sent a letter to your parents?', núNNa mùlak pogós hita 'We are already poor again'.

Na 'already': Nà làm tobán ibàna 'She is already getting older', Nà lója au 'I am already tired', Nà mátE apl ì 'The fire has already gone out', Na léleN ibàna duN mùll 'It is a long time since she got married'.

bE 'already, any more': núNNa máNan bE nasìda 'They have already eaten', núNNa dapóthu bE bukku ì 'I have found the book', núNNa digàdis hO bE 'Have you sold it yet?', dǎN pOsó bE ibàna 'He is no longer young', dǎN hupákke bE ì 'I do not use it any more', dǎN tartáOn au bE uashu òn 'I cannot tolerate this thirst any more', dǎN adÒN bE rOhànhu máNan 'I do not feel like eating any more', dǎN adÒN bE di àu 'I have none left', dibÈrEN ibàna ma daN disí bE mutìhana ì 'He saw that his pearl was not there any more'.

dOpÉ 'still': huìNot dOpE ibàna 'I still remember him', tòn dOpE diìNot ibàna dàlan tu silídduN 'He still remembers the way to Silindung',

bíbi dOpE 'It is still unripe', hupákke dOpE ì 'I still use it', mEtmÉt dOpE anaknibìan ì 'The puppy is still small', daN hàru rOták dOpE ì 'They are not really dirty yet', daN hót dOpE pardalànna 'His gait is still not steady', dàN hEa dOpE huída jabumúna 'I have not yet seen your house', nabáru dOpE dibòtO mardàlan 'He has only just learned to walk', tONtÓN dOpE hupákke ì 'I am constantly using it'.

pE 'in future, surely': hutúhOr pE ì marsògot 'I shall buy it tomorrow', hupatúdu pE dàlan 'I will show you the way', hubóan pE hO tu ibàna 'I will bring you to her', ró pE au marsògot 'I will certainly come tomorrow', rò pE hamu marsògot 'You will be coming tomorrow, won't you?', baEnónna pE pEsta ì 'He will certainly perform the ceremony', láO pE hàmi 'We will certainly go'.

The remaining predicate satellites may co-occur with the predicate particles dO and ma. They are the following: sái 'continually', náON 'already', hián 'previously', jO 'please', jOIO 'please', hapÉ 'really', rá 'perhaps', tÓN 'also', nán 'also', attÓN 'in fact', musÉ 'again', nian 'actually'.

They occur in four positions: (1) initially in the sentence, (2) immediately before the predicate particle, (3) immediately after the predicate particle, and (4) immediately after the subject. The following occur only in position (1): sái and náON; hián occurs in position (2); in position (3) the following: jO, jOIO, hapÉ, tÓN and nán; rá in positions (1) and (3); attÓN, musÉ, and nian in positions (3) and (4). Examples follow:

sái 'continually' (position 1): sài didatdátì dO 'He kept on doing it constantly', sài marhulìanhuífan dO nasìda 'They went around in circles continually', sài hOlan na marsáhit dO ulaónna 'He was just sick continually', sài láO dO ibana tusì 'He goes there all the time', sài marsaláan dO na hudòk 'The things I say are always wrong'.

náON 'already' (position 1): naON láO dO ibàna 'He has gone', naON matE hián dO api ì 'The fire had already gone out', naON tónnu dO nuaEN si butEt ì 'The baby is wet again', naON huída dO jabumùna 'I have seen your house (once)'.

hián 'previously, in the past' (position 2): mamòra hián dO àu 'I used to be rich', di huta hián dO àu 'I have been in the village before', didOk ibàna na dEkke hián ibana 'She said that she had been a fish previously', huàOp hián dO hatòp hO mùlak 'I had hoped that you would come home quickly'.

jO 'please' (position 3): só ma jO hìta 'let us rest', pikkíri ma jO tarìNOt tusì 'Please think it over', òn ma jO tahatài 'Let us discuss

it, please!'. ró j0 hamu marsògot 'Please come tomorrow!'. paíma j0 'Please wait!'. ulákh0n j0 'Do it again!'.

j010 'please' (position 3): tabàEn ma j010 sàda pÉsta 'Let us have a feast', úkk0r j010 'Please dive!', ajàri j010 au marhàta bátaK 'Please teach me to speak Batak!'. papÉak j010 'Please lie down!'.

hapÉ 'really' (position 3): Ón d0 hapE ulaðnmu 'So this is what you have been doing!'. nián d0 hapE ibàna 'She is really thin!'.

rà 'perhaps' (position 1 and 3): rà ró d0 nasa halak ì 'Probably all of them will come', rá d0h0t d0 ibana marÉddE 'Perhaps he will sing too', rà ró d0 hami marsogot 'Perhaps we shall come tomorrow' (also ró d0 rà hami marsògot), Ón ma ra dàlan la0 manbàEn ibana mùlak 'Perhaps this will be a way of making her come back'.

tÓN 'also' (position 3): adÓN d0 tON ib0tónhu 'I have a brother also', maNájari d0 tON ibàna 'He also teaches', tàkkup ma sada pinahanlóbu, sÉat ma, jala lÓppa ma tON 'Take a pig, slaughter it, and cook it also!', dib0t0 ibàna d0 tON na g0arónna musE dakdanak ì si gidíOn 'She also knew that the child would later be called Gideon', nàEN guruhónna d0 tON 'He also wants to learn'.

nán 'also' (position 3): matùtuN ma naN jabu í 'The house also burned down', sudè hàbaN naN akka manukna í 'All his chickens also flew off', sONOn í d0 naN raja maNalàut 'That was also the case with Rajah Mangalaut', sONON í d0 naN dipikkìri akka akkaNna ì 'And her sisters thought so too', diulah0n ibàna d0 naN ì 'And she did so'.

attÓN 'in fact' (positions 3 and 4): láo ma attON nasida 'And they did in fact go', dijàl0 si girsan ma attOn manuk í 'Girsang received the chicken alright', maNáNguk d0 ibàna attÒN 'She did indeed wail', sàhat ma nasida attON tu hùta ni panakk0 í 'They arrived in fact at the thief's village', dipaNid0 ibàna ma tu amaNna ì manbaEn sada sóp0 di ibana jala diolòì amaNna í d0 attOn 'She asked her father to build her a hut and he in fact consented to do so'.

musÉ 'again, later' (positions 3 and 4): Na tónu ibàna musE 'He is already wet again', disùru raja ì ma musE pìtu hàlak náí 'The rajah sent seven more men out again', lÍlu d0 ibàna musÈ 'He lost his way again', ràp marÉddE d0 nasida musE 'They sang together again', dib0t0 ibàna na g0àr0n musE dakdanak ì si gidíOn 'She knew that he would later be called Gideon'.

nián 'actually' (positions 3 and 4): nàEN láo d0 au niàn, alai dan sáut 'I intended to go, but I did not manage to', aut sura disí ma au niàn 'If only I had been there!', aut huhap0rsÈài ma hatanhu í niàn

'If only I believed in what I say!', aut boi ma nian mùlak au tu hutánhu
 'If only I could return to my village!', didOk ibàna ma asa takkùpOn
 nian pidon 'He told them to catch the bird'.

4. COMPLEX PREDICATES

A complex predicate contains two verbs. The first of these two verbs is the auxiliary verb, the second the main verb. There are two types of complex predicate. In the first the auxiliary verb is followed by a subject noun phrase, and a whole second predicate occurs after that subject. In the second type the auxiliary verb occurs before a sequence which could occur on its own as a clause (that is, a predicate-subject sequence). The predicate particle, if it occurs, appears between the auxiliary and the subject in the first pattern, and between the predicate and the subject in the second. In other words, in the first type of structure an extra predicate is attached after a clause containing the auxiliary, while in the second an auxiliary is attached before a clause containing the main verb.

The first type is exemplified in the sentence bòi dO au marláNE 'I can swim'. Here the auxiliary verb bòi 'to be able, to be possible' behaves syntactically like an intransitive verb such as lója 'to be tired', as in a sentence like lója dO àu 'I am tired'. After the subject of the first predicate there occurs a second predicate, viz. marláNE 'to swim'.

The second type of complex predicate is exemplified in the sentence íkkOn láO dO àu 'I must go'. In this case the auxiliary íkkOn 'to have to' occurs before a sequence which constitutes a clause, viz. láO dO àu 'I am going'.

In the first type the main verb is an active verb (i.e. either an intransitive verb or an active transitive verb). In the second type the main verb is one of the following: an active, a first passive, or a fourth passive.

The auxiliary verbs are: bòi 'to be able, to be possible', íkkOn 'to have to', jádi 'ought', náEN 'to be about to, to want', póla 'to have to', ólO 'to be willing, to want to', láO 'to go (and)', ró 'to come (and)'. Examples follow:

bòi 'to be able' occurs in the first type of complex predicate and also in the second together with either a first or a fourth passive verb, e.g. bòi dO au mamÉREN 'I can see', dàn bòi dápOt nasìda ibàna 'They could not find her' (dápOt 'to find' behaves syntactically like a first passive), dàn bòi gattfOn ì 'It cannot be exchanged', dàn adòN naNgO sàda sian nasìda na boi maNaIEhÓnsa 'There was not a single one

among them who was able to give him it', dàN bòi paNidòOn lòbi sian sa sòlup dahànOn gottína 'One cannot ask more than one measure of rice in exchange for it'.

íkkOn 'to have to' occurs in the second type of complex predicate with either an active, a first or a fourth passive verb, e.g. íkkOn marláNE dO hàmi 'We shall have to swim', íkkOn dibòtO hamu pajOrjOrhOn í 'You must learn this by heart', íkkOn hupajÓrjOr dO òn 'I must put these things in order', íkkOn buatOnmuna ma dua mánuk 'You must take two chickens', íkkOn mátE ma àu 'I shall have to die', íkkOn pahanònhu bábi 'I must feed the pigs', íkkOn jOIO olòan ni amáNna 'She must first have her father's consent', íkkOn dibòtO hamu ì 'You must know this' (also íkkOn bOtOOnmúna ì with the same meaning), íkkOn ràp marÉdde dO nasida 'They had to sing together'. Special emphasis is involved in the following sentences: íkkOn dO làO àu 'I absolutely have to go' (cf. the neutral íkkOn láO dO àu 'I have to go'), íkkOn dO bOtOónna ì 'He's bound to find out, that's something he must know about' (cf. íkkOn bOtOónna ì 'He must know that').

jádi 'ought' occurs in the second type of complex predicate with an active or fourth passive verb, e.g. dàN jádi maNaIEái 'One ought not to slander', dàN jádi laòsan na tinOttúhOn nasida í 'One ought not to violate what they have laid down', dàN jádi paNidòOn manaNaha gottína 'One ought not to ask for anything in exchange for it', dàN jádi bOtOónna manaNaha 'He must not know anything about it, it is impermissible for him to know anything about it'. Special emphasis is involved in jádi dO bOtOónna ì 'It is permissible for him to know about that'.

náEN 'to be about to, to want to' occurs in the first type of complex predicate, and also in the second together with a first or fourth passive verb, e.g. nàEN dO au maNàllaN dua mánuk 'I want to eat two chickens', nàEN dióli nasida dO ibàna 'They wanted to marry her', nàEN baEnOnmúna dO muse pÉsta 'You wanted to have another feast', nàEN takkOónna jOm ì 'He is just about to steal the watch', di tikki nàEN boladuaónna tarbegè ma sOàra sian bagásan 'When he was about to chop it in two a voice was heard from inside', nàEN ràp marÉdde dO nasida 'They are going to sing together', dibòtO ibàna dO tibù nàEN màsa sáhít disì 'She knew that there would soon be an epidemic there', naEN tabaOnnámi nama ì 'We are going to cut just that one down'.

pòla 'to have to, to need to, to have an opportunity to' occurs in the first type of complex predicate, and also in the second with an active or fourth passive verb, e.g. dàN pòla láO au 'I do not have to go', pòla dO bOtónna ì 'It is very likely he will find out', pòla dO hO

marnónaŋ d0h0t d0Nánmu 'You had a chance to have a chat with your friend', dàN pòla ìkk0n b0t00ónna ì 'He will not necessarily have to find out', pòla d0 ìkk0n b0t00ónna ì 'It's quite likely that he will find out'.

Ó10 'to be willing, to want to' occurs in the first type of complex predicate, e.g. ò10 d0 h0 là0 tu nat0ráshu 'Are you willing to go to my parents?', ò10 d0 au mamikkíri ì 'I want to think about it', daN ò10 ibana mamakkulíNi au 'He does not want to speak to me', b0àsa daN ò10 h0 d0h0t máNan 'Why do you want to eat with us?', ò10 d0 au hatòp múlak 'I want to go home immediately'.

láo 'to go (and)' occurs in the first type of complex predicate, e.g. là0 ma ibana madaNàdaN tu balián 'He went walking outside the village', là0 ma ibana múlak 'He came back'.

ró 'to come (and)' occurs in the first type of complex predicate, e.g. rò ma laÈna manjálaN ibana 'His brother-in-law came and greeted him', rò ma ibàna maNalúsi 'He replied'.

It may be noted that some auxiliary verbs occur in non-complex predicates, e.g. bó1 d0 'It can be done, it is possible', dàN Ó10 àu 'I am not willing', dàN pòla 'it is not necessary', ró d0 nasìda 'They came'.

5. PREPOSITIONAL OBJECTS

Certain intransitive verbs and adjectives are accompanied by an obligatory prepositional object. Such a prepositional object consists of a preposition and a noun phrase. The choice of preposition is dependent on the verb, i.e. a given verb or adjective governs a certain preposition. The position of the prepositional object is final in the sentence. An example of this construction is the sentence pajúppaŋ d0 hlta marsògot d0h0t ibàna 'We are meeting him tomorrow', in which pajúppaŋ 'to meet' is an intransitive verb, d0h0t 'with' is the preposition governed by pajúppaŋ, and the pronoun ibàna 'him' is the noun phrase.

The prepositions which appear in such cases are di, tu, and d0h0t. Examples of intransitive verbs: maNág0 d0 hò di àu 'You are letting me down', tartárik d0 au tu ibàna 'I was attracted to her', daN marbagas jòlma tu bégu 'Human beings do not marry spirits', margúna d0 òn tu àu 'It is useful to me', marít0 d0 àu tu nasìda 'I call her it0 (sibling of the opposite sex to ego)', manhatàì d0 nasìda tu hóda 'They talk to horses', Ó10 d0 au di ibàna 'I like him'.

Examples of adjectives: p0rlú d0 òn di hò 'You need this', lEá d0 r0hàna di àu 'He looks down on me', sumàn d0 ibàna tu ináNna 'She resembles her mother', buní d0 òn di ibàna 'This was hidden from her'.

6. ADVERBIAL PHRASES

A predicate may contain an optional adverbial phrase, e.g. nabbúra mífjur d0 àu 'I just now went down', cf. mífjur d0 àu 'I went down'. An adverbial phrase is either a time adverbial, as in the example just quoted, or a manner adverbial, e.g. halús d0 ibàna manhatàì 'He speaks beautifully', or finally a place adverbial, e.g. là0 d0 ibàna tu haúma 'He went to the rice-field'.

Time adverbials and manner adverbials frequently occur initially in the sentence and cause inversion of the subject and the verb, e.g. hatòp ma ibàna harùar sian jábu 'Immediately she came out of the house', cf. harùar ma ibàna sian jábu 'She came out of the house'. The inversion is less common if the subject is a noun rather than a pronoun, e.g. hatòp ma harùar inatta ì sian jábu 'Immediately the old woman came out of the house'. The predicate particle occurs immediately after the adverbial phrase.

Time adverbials may also appear in final position, e.g. lója d0 au nuaÈN 'I am tired now', là0 d0 au tu sikkóla nuàEN 'I go to school now', huòbbus d0 ápi nakkiníN 'I was blowing the fire just now', dihárat ulók au nakkinìN 'I was just bitten by a snake' (cf. nakkinìN d0 huòbbus api í 'I was blowing the fire just now').

Adverbial phrases are either adverbs or prepositional phrases. The class of adverbs includes the class of non-attributive adjectives, e.g. deNgán 'good, well', hatóp 'quick, quickly', gogó 'strong, strongly', and a number of other words, e.g. ujuNujúNna 'finally, at last'. The following is a short list of frequently occurring adverbs:

a. time adverbs: tibú 'soon', ípE 'just now', nabbúra 'just, recently', ujuNujúNna 'finally, at last', lá0s 'still', marsógot 'tomorrow', mamítt0r, pittór 'immediately', nabáru 'recently', sogót 'early', t0rús 'continually', girá 'immediately', tONTÓN 'always'.

b. manner adverbs: r0á 'badly', hojót 'fast', murá 'easily', dipós 'tightly', deNgán 'well', gogó 'energetically', rENÉ 'hard' (as in rENÉ módom 'to sleep hard').

Adverbial prepositional phrases are of great variety. The following is a short list of frequently occurring phrases:

a. time adverbial phrases: dina sada ári 'one day', (di) tikki í 'at that time, then', sàda ari ón 'today', natt0ári 'yesterday',

marsógot 'tomorrow', bòrNin On 'tonight', na tàOn í 'last year', natt0àri sadá 'the day before yesterday', hadúan 'the day after tomorrow', siduN í 'after that', duN í 'after that', di tikki Ón 'at present', tagan í 'at that time', martà0ntá0n 'for many years', marpùlupùlutá0n 'for decades', di àri marsògotna í 'on the next day'.

b. place adverbial phrases: disón 'here', tusán 'thither', tusí 'hither', disán 'there', tusón 'hither', disadú 'there', sian Ón 'by here, past here', tu haúma 'to the field', sian jábu 'from home', tu jábu 'home, to the house', di jábu 'at home, in the house'.

7. ADJECTIVAL PHRASES

An adjectival phrase is either attributive or predicative. An attributive adjectival phrase consists of the adjectivising particle *na* followed by an adjective, e.g. *na bólon* 'big'. (It may be recalled that the adjective in this environment has penultimate stress.) A predicative adjectival phrase consists of a simple adjective or a comparative adjective (i.e. a derived adjective containing one of the affixes *-um-*, *-an*, or *-um...-an*), e.g. *bolón* 'big', *umbólon* 'bigger', *bolonán* 'bigger', *umbolonán* 'bigger'.

Adjectival phrases occur in two constructions: as non-verbal predicates, and as sub-constituents of noun phrases. Attributive adjectival phrases occur in both constructions, predicative adjectival phrases appear only as non-verbal predicates. Thus in the sentence *na bólon d0* 'It is big' an attributive adjectival phrase *na bólon* 'big' occurs as a non-verbal predicate, while in the phrase *bagas na bólon* 'a big house' an attributive adjectival phrase occurs as a sub-constituent of the noun phrase *bàgas na bólon*. In the sentence *bolón d0* 'It is big' we have a predicative adjectival phrase occurring as a non-verbal predicate.

The predicative adjective occurs in one other major construction, namely as a constituent of an active transitive predicate containing the verb *baEn* 'to make' and an object noun phrase. For example, in the sentence *buní baEn hèpEN* 'Hide the money!' the predicative adjective *buní* 'hidden' is conjoined with the verb *baEn* and the object noun phrase *hèpEN* 'the money'. This sentence is clearly related to the sentence *buní d0 hèpEN* 'The money is hidden', in which *buní* appears as a non-verbal predicate, and the noun phrase *hèpEN na buni* 'The hidden money'.

An adjectival phrase containing a comparative adjective is optionally accompanied by a prepositional phrase consisting of *sian* and a noun phrase, e.g. *umbàlga d0 jabunasìda sian jabunámi* 'Their house is bigger than our house', cf. *umbálga d0 jabunasìda* 'Their house is bigger'.

An adjectival phrase may be accompanied by an adjectival modifier. The following adjectival modifiers occur before adjectives: *máccai* 'very', *tár* 'fairly', *tún* 'completely', *lám* 'more', *dàn pòla* 'not very', *dàn sadía* 'not very', *húraN* 'insufficiently'. Examples: *màccai ulí dO ibàna* 'She is very beautiful', *tùn asín dO* 'It is quite different', *lám ulí dO ibàna* 'She is more beautiful (than she used to be)', *tà argá dO ùtte nuàEN* 'Oranges are fairly expensive now', *dàn pòla pejét aEkgodan* 'The river is not very shallow', *dàn sadia péjet aEkgodan* 'The river is not very shallow', *húraN bálgá dO tas òn* 'This handbag is not big enough'. The adjectival modifier *situtú* 'extremely' occurs after adjectives: *namarbàju na ùli situtú* 'an extremely beautiful girl'.

8. NOUN PHRASES

Noun phrases occur as subjects, objects, agents, and non-verbal predicates, e.g. *manùan ÉmE dO hàmi* 'We are planting rice' (object noun phrase *ÉmE* 'rice', subject noun phrase *hàmi* 'we'), *dipùkka ibàna ma ápi* 'He made a fire' (agent noun phrase *ibàna* 'he', subject noun phrase *ápi* 'a fire'), *gúddur dO ì* 'It is a gourd' (non-verbal predicate *gúddur* 'is a gourd').

There are two types of noun phrases. In the first a nominal is preceded by an optional numeral or number marker, and followed by an optional attributive adjectival phrase and an optional demonstrative. Examples follow:

1. Nominal alone: *pésta* 'a feast', *rája* 'a rajah', *hùta ni amáNna* 'his father's village'.
2. Nominal followed by an adjectival phrase: *namarbàju na ùli* 'a beautiful girl'.
3. Numeral followed by a nominal: *pìtu bóru* 'seven daughters', *dùà mánuk* 'two chickens'.
4. Nominal followed by a demonstrative: *ràja í* 'the rajah', *sipàtu ón* 'this shoe', *hùta án* 'that village'.
5. Nominal preceded by a numeral and followed by an adjectival phrase: *dùà ùtte na bálgá* 'two large oranges'.
6. Nominal followed by an adjectival phrase and a demonstrative: *ùtte na bàlgá ón* 'this large orange'.
7. Nominal preceded by a numeral and followed by a sequence consisting of an adjectival phrase and a demonstrative: *dùà ùtte na bàlgá ón* 'these two large oranges'.

8. Nominal preceded by a number marker: àkka hálak 'people'.
9. Nominal preceded by a number marker and followed by a demonstrative: àkka bùkku ón 'these books'.

In the second type of noun phrase the nominal is preceded by an optional number marker, and followed first by a numeral, which must be preceded by na, and finally by an optional demonstrative. Examples follow:

1. Nominal followed by a numeral: nasìda na dúa 'the two of them'.
2. Nominal followed by a numeral and a demonstrative: hòda na dúa í 'the two horses', bòru na pìtu ón 'these seven daughters'.
3. Nominal preceded by a number marker and followed by a numeral and a demonstrative: àkka hòda na dúa ì 'the two horses'.

A nominal is one of the following: a common noun, a proper noun preceded by the particle si, a pronoun, a ni- construction, or a demonstrative. Examples follow:

1. Common noun: dakdának 'child', tíkki 'time', hamamátE 'death', túlaN 'mother's brother'.
2. Proper name: si mínar 'Minar', si mÓkmOk 'Fatty'.
3. Pronoun: áu 'I', hámi 'we (exclusive)'.
4. A ni-construction: túlaN ni si mínar 'Minar's uncle', mànuK ni ràja ni hùta í 'the chicken owned by the rajah of that village'.
5. Demonstrative: ón 'this one'.

One more class of elements appear in noun phrases, namely the class of quantifiers. The quantifiers are as follows: sudé 'all', sudéna 'all', -sa 'all', nása 'all', saluhút 'all', gánup 'each, every', bé 'each'. Of these nása and gánup appear before nominals, e.g. nàsa bajúnhu 'all my clothes', gánup ári 'every day'; -sa is enclitic to a preceding numeral, e.g. duánsa 'both', tolúnsa 'all three', Opátsa 'all four', OnÓmsa 'all six'; sudé occurs before a nominal, e.g. sudè jÓlma 'all human beings', before a number marker, e.g. sudè àkka háha 'all the brothers', before any demonstrative but i, e.g. sudè ón 'all these', and after a pronoun or demonstrative, e.g. nasìda sudé 'all of them', ì sudé 'all of them'; sudéna occurs preceded or followed by the demonstrative i, e.g. sudèna í or ì sudéna 'all of them'. It may be noted that -sa does not occur in the second type of noun phrase enumerated above. Thus there is no *nasìda na tolúnsa (rather sudè nasìda na tÓlu) 'all three of them'.

Noun phrases with a deleted nominal occur, e.g. *sudè na àsiN í 'all the others'* (cf. *sudè hàlak na àsiN í 'all the other people'*), *akka í 'those things'* (cf. *àkka hòda í 'the horses'*), *àkka na àsiN í 'the others'* (cf. *àkka hàlak na àsiN í 'the other people'*), *àkka na manjírìr 'reptiles, (lit.) those (things) which creep'*. Relative clauses with deleted antecedents fall into this category, see section E2, p.108 of this chapter. Thus the phrase *na umbOtósa 'who knows that'* is a relative clause in *hàlak na umbOtósa 'a person who knows that'* while it can function as a noun phrase in *ìsE na umbOtósa 'Who knows that? Who is it that knows that?'*, where it may be regarded as related to a structure such as *ìsE dO hàlak na umbOtósa 'Who is the person who knows that?'*.

The pronouns are *áu 'I'*, *hó 'you (singular)'*, *ibána 'he, she'*, *híta 'we (inclusive of the speaker)'*, *hámi 'we (exclusive of the speaker)'*, *hamú 'you (plural)'*, and *nasída 'they'*. Some speakers use the form *imána* instead of *ibána*. It is customary to use *hamú* when one addresses a member of another *márga* (exogamous sib). Similarly *nasída* replaces *ibána* when one is referring to a member of another *márga*. The demonstrative *i* functions as an optional inanimate third person singular pronoun, e.g. *hupasáut dO ì 'I succeeded in doing it'*, *ìsE na pamasúkhOn 'Who put it in?'*. A special set of pronouns is used in the *ni*-construction, see section B11 of this chapter, p.98.

There are two enclitic pronouns with the morphophonemic shape *sa*:

sa₁ optionally replaces *ibána 'he, she'* after a second passive verb, and after *dápOt 'to find'*, *júppa(N) 'to meet'*, and *tólap 'to be physically capable of'*, e.g. *dàN taridása 'He could not see it'* (cf. *dàN tarida ibána* with the same meaning), *tartONòssa dO hÈpEN tu natOrásna 'She is able to send money to her parents'* (cf. *tartONOs ibána dO hÈpEN tu natOrásna* with the same meaning), *nùNna dapÓtsa bE 'He has found it'* (cf. *nùNna dàpOt ibána* with the same meaning), *juppànsa ma úlok 'He found a snake'*, *juppàsa ma pOnu í 'He encountered the turtle'*.

sa₂ optionally replaces *i 'it'* and less frequently *ibána 'he, she'* after an active verb provided the element replaced is an object, e.g. *ibána dO na manabunihònsa 'He was the one who hid it'* (cf. *ibána dO na manabunihOn ì* with the same meaning), *lào ma ibana tu raja ì maNidósa 'He went to the rajah to ask for it'*, *dijou nasida ma sàda dàtu maNubatísa 'They called in a medicine-man to cure him'*.

In appositional constructions the two nouns occur side by side with no intervening syntactic marker; the generic term precedes the specific term. It is common for the second noun to be a location or instrument noun. Examples: *màrga haráhàp 'the Harahap family'*, *hàta bátaK 'the Batak language'*, *tàO tòba 'Lake Toba'*, *hùta hatubùan ni ràja í 'the*

*raja*h's native village, the village in which the *raja*h was born',
haròtas panurátan 'writing paper'.

9. DEMONSTRATIVES

Demonstratives occur in two constructions: (1) as noun phrases, and (2) as attributes to nominals in noun phrases. Thus the demonstrative *On* 'this' is a noun phrase in the sentence *ísE dO Òn* 'Who is this?', and an attribute of a nominal in the noun phrase *hùta Ón* 'this village'.

The following are the demonstratives: *i* 'this', *On* 'this', *an* 'that', *ÓddEN* 'the afore-mentioned', *adúi, adú* 'that, that yonder', *niÓN* 'this', *nián* 'that'. The first three are much more frequent in the speech of my informants than the others. The one which occurs most frequently is *i*, which is especially common in noun phrases where it functions as a definite article. Thus a narrative might begin as follows: *adÒN ma sàda borubòru na pìtu borúna. ia bòruna í adÒN dO sada mutiha di gànup nasída, jàla disìppan inaNnasída dO mutiha ì di bagàsan pótì* 'There was once a woman who had seven daughters. Her daughters each had a pearl, and their mother put the pearls in a chest'. Note that the noun phrase *borúna* 'her daughters' appears first without an accompanying demonstrative, but that whenever it recurs it is accompanied by *i*. Similarly *mutiha* 'pearl' is without an accompanying *i* when it appears first, but occurs with *i* on its second appearance.

In certain expressions with a temporal reference, *i* refers to the past, and *On* to the present, e.g. *tagan Ón* 'at present', *tagan í* 'at that time', *na tàOn í* 'last year', *bòrNin Ón* 'tonight'.

ÓddEN 'the afore-mentioned' occurs only as attribute to nouns, e.g. *bàbi ÓddEN* 'the pig just mentioned'.

Further examples of demonstratives:

i: ì dO alàna umbàEn sONOn i gìjjaN ári au 'That is the reason I am so late', *nàEN tabaOnnámì nama ì* 'We are going to cut it down', *paúlak ì* 'Put it back!', *áú dO manbàu ì* 'I was the one who wove it', *í ma akka nìnnà nasída bè* 'This is what each of them said', *pagÓrgOr ma àpì ì* 'Make the fire blaze', *múruk dO tuNganEdolina ì musÈ* 'Her husband was angry again', *tàllus ma tàkke i sian taNánna* 'The are slipped out of his hand'.

On: àha dO lapàtan ni Ón 'What is the meaning of this?', *Ón dO jabùnhu* 'This is my house', *ísE maNusÈhOn susu Ón* 'Who has spilt this milk?', *àha nidÒkmu tu àkka hàmi Ón* 'What are you going to say to us here?', *parjàdì ni Ón daN hubòtO* 'How this happened I do not know', *pìga jOm Ón ibana disòn* 'How many hours is he going to be here?'.

i: lòsOkna í hò 'How lazy you are!', gàjjaNna í ìhur ni hòrbO òn 'What a long tail this buffalo has!', tòkna í ulùnhu 'What a painful headache I have!', mùlana ì sònaN dO àu 'In the beginning I was happy'. This may be regarded as a special idiomatic use of i.

an: mandàbu aÉk dO ibàna tu hauma àn 'He is making water flow down into that rice-field', tu tòru án hò 'Go down (out of the house)!', gumòdaN dO òn dipàkkE sian án 'This one is used more than that one', àhe dO án 'What is that over there?'.

10. PREPOSITIONAL PHRASES

Prepositional phrases occur as adverbial phrases (see section B6 of this chapter), either as constituents of predicates or as whole predicates. In the sentence làO dO ibàna tu hutána 'He went to his village', the predicate làO dO ... tu hutána 'went to his village' contains the prepositional phrase tu hutána 'to his village' functioning as an adverbial phrase, while in the sentence di jábu dO ibàna 'He is in the house', the prepositional phrase di jábu is an adverbial phrase which constitutes a whole predicate.

A prepositional phrase is a noun phrase preceded by a preposition. The commonest prepositions are the following: di 'at, in', tu 'to', sían 'from', dÓhOt 'with', ía, áNgO, iáNgO 'as regards', dúN, síduN 'after', tágan 'during', di tíkki 'during', di bágas, di bagásan 'within, in', tu bagásan 'into', mándOk 'to', sáhat tu 'up to, as far as', humalíaN 'around', dína 'at (with temporal expression)', manjOnÓki 'near', dóppak 'in the direction of', mandapÓthOn 'towards', múlak tu 'back to', manjuppákhOn 'outside', sípat 'the same size as', dibáEn 'by means of', dóshOn 'like', dúNhOn ni 'except', taríNót tu 'concerning', híra 'like'.

di 'in': di jábu dO ibàna 'He is at home', tòlu ári àu di mèdan 'I was in Medan three days', adÒN dO ònOm náí di àu 'I have six left', dán adÒN bE di àu 'I have none left', mòlOduN sáE di hò marísap hìta 'When you are satisfied we will have a smoke', nùNna adÒN di gànup nasìda rábi 'They each have a knife', mubbaNùbbaN dO àkka hàu di táO 'Trees are floating on the lake', hóras ma di hamù 'Greetings to you!', di jábu dífa hamù marìNànan 'In which house do you live?'.

tu 'to': làO dO ibàna tu jábu 'He went home', nínhu ma tu nasìda 'I told him', hulÈan dO pitÓlOt tu ibana 'I gave him a pencil', màccai sumàn dO hò tu ináNmú 'You are very similar to your mother', àha dibaEn hò tu na nidàpÓtmu ì 'What did you do with that thing that you found?', nàEk kapalhàbaN dO àu tu mèdan 'I flew to Medan', tu ìsE didaNgúrhOn

'To whom did he throw it?', tu t0rùan hò marmEammÉam 'Go to the bottom (of the village) and play!'.

sían 'from': map0rus ma nasída sian jábu 'They fled from the house', dàN maràsal sian huta Ón ibàna 'He did not originally come from this village', ìsE sian híta na sàla 'Which of us is wrong?', sian dfa d0 ì 'Where is it from?', margùru d0 nasída sian ibána 'They are learning from him', mamólus d0 ibàna sian Òn 'He passed by here', dipabàli d0 ibàna sian huría 'He was banned from the church'.

d0h0t 'with': dipùkkul ma tuNganEborùna d0h0t hau-háu 'He beat his wife with a stick', marmEàmi d0h0t itÓna d0 nasída 'They are playing with their brothers', marÈddE ma ibàna d0h0t s0àra na maccaí gogó 'She sang in a very loud voice', dibòan ma d0h0t suksian ì mùlak tu jabúna 'She took it along with her washing back to her house'.

ía 'as regards': ìa raja Ón pitu borúna 'As for this rajah, he had seven daughters', ìa tùbu ni si parjólo sáda d0 'As for the first wife, she had one child', ìa mutiha Ón disìppan d0 ì di bagàsan pÓti 'As for this pearl, he put it away in a chest', ìa si sútan h0lan na marsáhit ula0nna 'As for Sutan, all he did was to be ill, he was constantly ill'.

aNg0 'as regards': aNg0 mará dàN adÓN 'As for danger, there is none', aNg0 í dàN deNgán 'As for this one, it is no good', aNg0 Ón dàN hubÓt0 'As for this, I do not know', àNg0 si sútan gabE parhaúma d0 ibàna 'As for Sutan, he became a rice farmer'.

duN 'after': dùN dua búlan 'after two months', duN í 'after that, thereupon', duN Ón 'after this'.

síduN 'after': sìduN í 'after that, thereupon', sìduN Ón 'after this'.

tàgan 'during, at': tàgan í 'at that time', tàgan Ón 'at the present time'.

di tíkki 'during': di tíkki halÈOn atturapár0n d0 nasída 'During the famine they starved'.

di bágas, di bagásan 'inside, within': di bàgas í 'inside here', di bagásan jábu 'within the house'.

tu bagásan 'into': disùruk ibana ma liaN ì tu bagásan tán0 'He followed the cave into the earth'.

mánd0k 'to': didók ibana mànd0k ibàna 'He said to him'.

sáhat tu 'up to, as far as': dibòan d0 mutìha ì sàhat tu barìba ni láut 'He took the pearl all the way to the sea shore'.

humalíaN 'around': dipùkka ibàna ma àpi humalíaN ibána 'He started a fire around him', disabùrhOn ibàna ma sugasùga humalíaN bòna ni pìsaN í 'He scattered thorns around the trunk of the banana tree'.

dina 'on, at': dina sa hali 'once upon a time', dina sada ari 'one day', dina sa b0rNin 'one night'.

manjOnÓki 'near': manjOnòki hùta í pajúppaN d0 hàmi 'We met near the village'.

dòppak 'towards, in the direction of': manaili ma ibàna dòppak gíjjaN 'She glanced upwards', daN adON tahìnhu là0 dòppak í 'I have no intention of going there, as far as that', adON d0 dàlan na là0 dòppak hùta 'There is a path which goes to the village'.

mandapÓthOn 'towards, to meet': hatÒp ma là0 akka namarbàju mandapÓthOn ibàna 'Immediately the girls went towards him'.

mùlak tu 'back to': dibòan ma d0h0t suksìanna ì mùlak tu jabúna 'She took it along with her laundry back to the house'.

manjuppákhOn 'outside': manjuppàkhOn mèdan rò ma údan 'Outside Medan it began to rain'.

sípat 'the same size as': sipat jábu d0 bàlga ni galùbbaN ì 'The waves were as high as a house', sipat áu d0 rabbarabba ì 'The grass was as tall as I am'.

dibaEn 'by means of': tarsúga ma ibàna dibaEn akka sugasuga ì 'He was pricked by the thorns', màccai marràra dibaEn lamúnna 'very red on account of its ripeness'.

dòshOn 'like': dòshOn sòddaN ni mataniári 'like the rays of the sun'.

dúNhOn ni 'except': mablar ma sudè akka hàhana ì dùNhOn ni si sàda dópa 'All his brothers were afraid except Sada Dopa', dùNhOn ni hò ísE 'Who is next after you?'.

taríN0t tu 'concerning': marbadài d0 nasìda taríN0t tu hagogonasída 'They had an argument concerning their strength'.

híra 'like': manòrt0r d0 ibàna híra borubòru na ríttik 'She danced like a mad woman'.

11. THE ni-CONSTRUCTION

This construction has three immediate constituents: the first is either a noun phrase or a third or fourth passive verb, the second is the word ni, and the third is a noun phrase, e.g. pát ni hòrb0 í 'the buffalo's legs' (immediate constituents: pát + ni + hòrb0 í), na binàEn

ni ràja í 'that which was done by the rajah' (immediate constituents na bináEn + ni + ràja í). A ni-construction is a noun phrase and hence its first or third constituent may also be a ni-construction, e.g. hàjut ni ràja ni hùta í 'the pouch belonging to the rajah of that village' (immediate constituents hájut 'pouch' + ni + ràja ni hùta í 'the rajah of that village', the latter constituent being itself an instance of the ni-construction).

The pronouns do not occur as third constituents in the ni-construction. Instead a member of a special set of enclitic pronouns occurs after the first noun phrase or passive verb. The enclitic pronouns are: -hu 'I', -mu 'you (singular)', -na 'he, she', -ta 'we (inclusive)', -námi 'we (exclusive)', -múna 'you (plural)', -nasída 'they'. Examples: taNán-hu 'my hand' (cf. tàNan ni ràja í 'the rajah's hand'), hàjut-ni-napuránmu 'your betel pouch' (cf. hàjut-ni-napùran ni ràja í 'the rajah's betel pouch'), lagE na binau-na 'a mat which was woven by her' (cf. làgE na binàu ni si mínar 'a mat woven by Minar').

The ni-construction has a distributive meaning in sentences containing píga 'how many?', e.g. píga hàlak máddur ni pabrik òn 'How many foremen has the factory got?', píga píra ni mànuk ì 'How many eggs does the chicken lay?'.

Otherwise the ni-construction has a possessive meaning if the first constituent is a noun phrase, e.g. jàbu ni ràja í 'the rajah's house', and an agentive meaning if the first constituent is a verb, e.g. takkùpOn ni tuNganEdolína 'to be caught by her husband'.

Demonstratives do not occur after the first immediate constituent, but only after the third, e.g. ràja ni hùta í 'the rajah of the village', not *raja i ni huta i. Similarly in a series of encapsulated ni-constructions the demonstrative occurs at the end of the last noun phrase, e.g. hàjut ni ràja ni hùta ni amàNna í 'the pouch belonging to the rajah of his father's village'. The same rule applies to cases in which the second and third constituents are represented by an enclitic pronoun, e.g. hòdana ón 'this horse of his'.

12. COMPLEX PRINCIPAL CLAUSES

Intermediate between simple and complex sentences are sentences consisting of a complex principal clause. For example, the sentence adÒN dO sàda s0bbà0n manhaccìti anakna í 'There is a spirit tormenting his son' is related to the pair of sentences adÒN dO sàda s0bbá0n 'There is a spirit' and manhaccìti anakna í dO sàda s0bbà0n 'A spirit is tormenting his son'. The first sentence quoted will be said to contain two predicates adÓN dO 'there is' and manhaccìti anakna í 'is tormenting his

son', and a single shared subject noun phrase sàda s0bbá0n 'a spirit'. The types of complex principle clauses will be enumerated under the verb appearing in the first predicate in sentences of this kind:

adÓN 'there is' occurs a. with an active predicate and the shared subject placed after the second verb, e.g. adÓN rò sa hàlak tu labbúnna 'A man came to her side', or placed between the two verbs, e.g. adÓN d0Nànhu rò natt0áí 'A friend of mine came yesterday', and b. with a passive predicate, e.g. adÓN ma dàp0t nasída ákkal 'They hit upon a stratagem', dàN adÓN dapótsa 'She did not find any', dàN adÓN èmE paNanónta 'There is no rice for us to eat, we have no rice to eat', adÓN d0 didaNgùrh0n nasída 'Have they thrown anything?', adÓN si ulaónhu 'I have something to do'.

baEn 'to make'. The active manbáEn occurs with a second active verb, the object phrase dependent on manbáEn functioning as the subject noun phrase of the second verb, e.g. manbàEn ibàna marsiájar d0 àu 'I made him study'. The first passive forms occur with a second active predicate, the subject of the passive verb functioning as the subject of the second verb, e.g. hubàEn d0 ibàna marsiájar 'I made him study'. The second passive form tarbáEn 'can be done, is possible' is conjoined with a second active predicate, the agent of tarbáEn functioning as the subject of the second verb, e.g. daN tarbaÈnsa manbuàtsa tu tàn0 na mahíaN 'He could not take it to dry land'.

lEan 'to give'. The first passive forms occur with a fourth passive verb, the subjects of the two predicates being identical, e.g. dilEan ibàna ma paNàn0n ni tuNganEborúna 'He gave it for his wife to eat'.

paulá 'to pretend'. The first passive forms occur with active predicates, the agent of the first verb and the subject of the second verb being identical, e.g. hupaulá d0 au màrsak 'I pretended to be sad'.

d0kh0n 'to tell, order'. The first passive forms occur with active predicates, the subjects of the two predicates being identical, e.g. didòkh0n raja ì ma nap0sòna manàkkup mánuk 'The rajah told his servants to catch a chicken'.

A group of intransitive verbs occur with second active predicates, the subjects of the two predicates being identical in each case, e.g. maradian ma nasida là0 mandáNgur 'They stopped throwing', duN sùn nasida marháta 'When they had finished talking', marsàkkap ma ibàna la0 manOpótsa 'He decided to go and meet him', sò ma ibàna la0 mandáNgur 'He stopped throwing', martàhi d0 nasida naEN lá0 tusàn 'They intended to go there', martùptup ma nasida maNalulùì mutiha í 'They resolved to look for the pearl', marjàjji ma ibàna maNubatfsa 'He promised to cure him'.

A group of first passive verbs occur with second active predicates, the agent of the passive predicate coinciding with the subject of the second (active) predicate, e.g. *disàkkap ibàna ma hatòp múlak* 'He decided to return immediately', *dijajjih0n ibàna ma maNajári nasìda* 'She promised to teach them', *didatdàti ibàna ma manhatái* 'He continued to talk'.

In the case of the two verbs *ulak-h0n* and *ulak-i* 'to do again' the first passive forms occur with a following active predicate while the active forms occur with a preceding first passive predicate. In the first construction the agent of the first verb, whether *ulak-h0n* or *ulak-i*, coincides with the subject of the second (active) predicate. In the second construction the subject of the second verb (i.e. *ulak-h0n* or *ulak-i*) coincides with the agent of the first (passive) predicate. Examples of the first construction: *diulàkh0n ibàna ma manúrat* 'He wrote it again', *nùNna diulàki ib0t0nhu paulih0n tiNgála* 'My brother is making a plough again'. Example of the second construction: *dslùrat ibàna ma maNulákh0n* 'He wrote again'.

The first of these two constructions is also found with verbs derived from adjectival roots, e.g. *pagira* 'to do quickly' from *girá* 'quick', *pahojot* 'to do quickly' from *hojót* 'quick', *pajolo* 'to do earlier' from *jólo* 'early', *gogo* 'to do energetically' from *gogó* 'strong', *hariNgásh0n* 'to do industriously' from *riNgás* 'industrious'. Examples: *dipagìra ibana mardálan* 'He walked more quickly', *dipahòjot ibana mardálan* 'He walked more quickly', *dipajòlo ibana máNan* 'He ate earlier', *dipasògot ibana lào tu sikkóla* 'He went to school earlier', *digògo alogo ìmaNóbbus* 'The wind blew vigorously', *dihariNgásh0n nasìda ma manbáu* 'They wove baskets industriously'.

13. TOPICALISATION

When the subject of the sentence is topicalised the normal order of the subject and the predicate is reversed, the predicate particle being unaffected by this transposition of order. Thus the subject of the sentence *dijou ibàna d0 anákna* 'He called his son' is topicalised in the following sentence *anákna d0 na dijou ibàna* 'It was his son that he called', in which the relative positions of the subject *anakna* and predicate *dijou ibana* have been reversed, and the predicate particle *d0* occurs between subject and predicate. Note also the occurrence of the word *na* before the predicate in this example. In other examples this element is not present, e.g. *áu ma marbàb0* 'I will do the weeding', *ìsE paluàh0n manuk í* 'Who let out the chickens', *áu d0 manalùh0n ibàna* 'I made him lose', *lòm0 ni amánta d0 dibaEn ibàna* 'He does just what

his father wants, his father's wish is what he does', là0 d0 amànta i marsóban jala inàtta ì dibùkka sipatúna 'The old man went to collect firewood, while the old woman took off her shoes', àu saddíri d0 manbùat 'I myself took it'. Sentence stress occurs on the preposed subject in all cases.

To topicalise the agent in a passive predicate the sentence must be converted into the active and the resulting subject may then be topicalised, e.g. to topicalise the agent *ibána 'he'* in the sentence *dijou ibàna d0 anákna 'He called his son'*, the active sentence *manjou anákna d0 ibàna* must be used as a point of departure, and the resulting topicalised sentence reads *ibána d0 na manjou anákna 'He was the one who called his son'*. Conversely the object noun phrase in an active predicate cannot be topicalised until the sentence has been passivised. Thus *anákna 'his son'* in the sentence *manjou anákna d0 ibàna 'He called his son'* is topicalised in the sentence *anákna d0 na dijou ibàna 'It was his son that he called'*.

It is possible to topicalise the verb in a transitive predicate, e.g. *manjóu anákna d0 ibana daN na mamÉREN 'He called his son, he didn't see (him)'*, *hòlan na manjóu anákna d0 ibàna dàN na mamÉREN 'He only called his son, he didn't see (him)'*.

In another type of topicalised sentence the topicalised element becomes a preposed prepositional phrase introduced by *ía, áNg0, iáNg0 'as regards'*, e.g. *aNg0 disón daN l0mò r0hànhu tíNgai 'As for here, I should not like to stay (here)'*, *aNg0 ón dàN hubót0 'As for this, I do not know'*. In some instances the topicalised element leaves a pronominal trace before being preposed, e.g. *ia begu ón tòlu borúna 'As for this spirit, it had three daughters'* (cf. *adON d0 tolu boru ni begu On 'This spirit had three daughters'*, *adON d0 tolu boruna 'He had three daughters'*).⁴

14. CO-ORDINATION

The particle *dóh0t* occurs between co-ordinate noun phrases, prepositional phrases, and co-ordinate predicates, e.g. *adON bè d0 pittùna d0h0t jaddelána 'Each of them has doors and windows'*, *dibEREN hò d0 nat0ràshu d0h0t ibòtonhu í 'Can you see my parents and my brother?'*, *diida ibàna d0 sàda hùtIN d0h0t sàda bíaN 'He saw a cat and a dog'*, *dipaboa ibàna ma sudè na màsa tu ibána d0h0t na dÈkke hián ibàna 'She told him everything that had happened to her and that she had been a fish before'*, *daN sàE di hò d0h0t di hámi 'There is not enough for you and for us'*.

Between adjectival phrases the co-ordinating particle is *jala*, e.g. *ròk na bìrON jala na jÉppEk 'a short black skirt'*.

In a sequence of more than two co-ordinated elements a co-ordinating particle appears only between the last two, e.g. là0 d0 ibana tu huta maNàlap ùtte pàNir sùri d0h0t sápa 'She went to the village to fetch some lemon (ùtte pàNir), a comb (sùri), and a dish (sápa)'. In a co-ordinate noun phrase the demonstrative appears after the last conjunct, e.g. biàNna d0h0t hùtiNna í 'his dog and his cat'. Note, however, that the enclitic pronoun -na 'his' is repeated after each nominal (not *bian d0h0t hutiNna í).

mánaN 'or' occurs in the same positions as d0h0t, e.g. hap0rlùan ni ùbat manaN na ásiN 'things necessary for a remedy or other things'.

C. INTERROGATIVE SENTENCES

A yes-no question differs from the corresponding declarative sentence in intonation only: a rising terminal contour as against the falling contour characteristic of declarative sentences, e.g. s0rdák d0 pìttu í 'Is the door locked?', nùNna lá0 ibàna 'Has he already gone?'.

Yes-no questions are frequently introduced by the sentence-particle na, e.g. na ditùh0r h0 hoda í 'Did you buy the horse?', na manb0an hamag0an d0 hò 'Will you be bringing bad luck?', na g0táp d0 manaN na dig0táp d0 'Has it got broken (by itself), or was it broken (by someone)?'.⁵

Supplement questions contain one of the interrogative particles: ísE 'who', díá 'which', áha 'what', bEása (and b0ása) 'why', bEhá 'how', píga 'how much, how many', sadíá 'how, by how much', addígan 'when'. Interrogative particles occur most frequently in initial position, e.g. àha dipikkíri hò 'What are you thinking about?'. When an interrogative particle replaces the noun phrase in a prepositional phrase, the whole prepositional phrase is preposed, e.g. sian áha d0 í 'What is it made of?', di dìá h0 marinánan 'Where do you live?'. When an interrogative particle replaces an adjectival phrase within a noun phrase, the whole noun phrase is preposed, e.g. m0t0r na díá m0t0rmu 'Which is your car?', jàbu na díá diinàni hamù 'Which house do you live in?', r0k dìá pakkeÓnhu 'Which skirt shall I wear?'.

Examples of non-initial interrogative particles are rare: maNalulùí áha hò 'What are you looking for?', dùkk0n ni hò ísE 'Who is after you?', dibukkùsh0n ísE ninmu 'Who did you say wrapped it up?', marinánan di díá h0 'Where do you live?'.

When an interrogative particle replaces a subject noun phrase the remainder of the sentence is frequently cast in the form of a relative clause and is introduced by the relativising particle na, e.g. àha na niluluánmu 'What are you looking for, what is being looked for by you?',

àha d0 na pinàNannasída 'What is she eating?'. Note the occurrence of a third passive verb in these examples, a verb form characteristic of relative clauses. In some instances the introductory na is absent, e.g. àha nidòkmu tu hámi 'What are you going to say to us?'.
 àha d0 na pinàNannasída 'What is she eating?'. Note the occurrence of a third passive verb in these examples, a verb form characteristic of relative clauses. In some instances the introductory na is absent, e.g. àha nidòkmu tu hámi 'What are you going to say to us?'.

It may be noted from these examples that objects and agents are for the most part not directly questioned. When an object needs to be questioned the sentence is usually cast into the passive and the resultant subject noun phrase is questioned, e.g. àha dihabiàri hó 'What are you afraid of?', àha habiaránmu 'What are you afraid of?', àha d0 akka si gadis0nmúna 'What have you got to sell?', àha na pinàNanmu í 'What are you eating?'. Similarly when an agent noun phrase needs to be questioned the sentence is usually cast into the active and the resultant subject noun phrase is then directly questioned, e.g. ìsE na manbukkùsh0n Ón 'By whom was this wrapped?'. This is not a hard and fast rule, but if an object or agent noun phrase is directly questioned it cannot in that case be preposed, e.g. maNalulúi áha hò 'What are you looking for?' (not *aha maNalului hò).

píga 'how much, how many' replaces any cardinal number, and occurs in the same position relative to the accompanying nominal as the corresponding numeral would, e.g. píga píra ni mànuK ì 'How many eggs does this chicken lay?' (cf. dùa píra ni mànuK ì 'The chicken lays two eggs'), nòm0r píga d0 hò 'What number are you?' (cf. nòm0r dùa 'number two'), pùkkul píga nuàEN 'What time is it?' (cf. pùkkul tólu nuàEN 'It is three o'clock').

sadía 'how, by how much' replaces adverbs and predicative adjectives, e.g. sadía léleN ibana dis0n 'how long has he been here?', sadía godàN tarbòan hó 'How many can you take?', sadía dào tardàNgur hò bátu 'How far can you throw stones?', sadía bòli ni h0rb0 Ón 'What is the price of this buffalo?'.

There are two interrogative verbs, both derivatives of the root hua, namely marhúa 'what doing' and mahúa 'what is (was) happening to', e.g. marhúa d0 biàN ì 'What is the dog doing?', m0l0duN sìduN 0n marhúa áu 'What this is finished what shall I do?', na marhúa d0 hamù umbàEn na pòla ró hamù tus0n 'What has made it necessary for you to come here?', mahúa ibàna 'What happened to him?', mahúa simalòl0Nmu í 'What is the matter with your eye?'. Note also the conjugated verb ha-hua-i, e.g. dihahuài jabum í 'What has somebody done to your house? Has somebody done something to your house?' (compare dàN dihahuài manaNíE pE 'Nobody has done anything to it').

D. IMPERATIVE SENTENCES

Imperative sentences are of two types: non-transitive and transitive. A non-transitive imperative sentence consists of an intransitive or non-verbal predicate and a subject, the subject being one of the following pronouns: áu 'I', hó 'you (singular)', hamú 'you (plural)', híta 'we (inclusive)'. The usual syntactic particle is ma. Examples: múlak ma hò 'Go home!', marísap ma híta 'Let us smoke', láo ma hamú 'Go!', tu tOruán hò 'Go out (of the house)!', gogó pE àu 'Oh that I may be strong!'. In peremptory second-person commands the pronoun is often deleted, e.g. láo 'Go!'. The predicate particle ma introduces a less peremptory note, e.g. burjú hò 'Be polite!' is more imperious than burjú ma hò.

A transitive imperative sentence consists of a predicate and a subject, the predicate in turn consisting of a transitive verb in the imperative form followed by either hó or hamú. The predicate particle is ma, but it is optional as in the case of the non-transitive imperative sentences. Any subject of a passive transitive sentence can appear as the subject of a transitive imperative sentence, e.g. gàdis hamú ma ì 'Sell it!', bñnu hamú ibàna 'Kill him!', památE àu 'Kill me!'.

Negation in imperative sentences is marked by the particle ùnaN in initial position, e.g. ùnaN bñnu àu 'Do not kill me!', ùnaN ínum àEk ì 'Do not drink that water!', ùnaN láo hò 'Do not go!'. If the verb and the subject pronoun in a non-transitive imperative sentence are inverted, a less harsh command results, e.g. ùnaN hO láo 'Don't go, please!'. The predicate particle ma does not occur in negative imperative sentences.

In non-transitive imperative sentences containing a preposed adverbial, the verb is shifted to final position, e.g. disón ma hO hùddul 'Sit here!' (cf. hùddul ma hO 'Sit!'), disán ma gattùNhOn 'Hang it there'.

E. COMPLEX SENTENCES

A complex sentence contains more than one clause. The relation between two clauses in the same sentence is either co-ordinate or subordinate.

1. CO-ORDINATE CLAUSES

Co-ordinate clauses are separated by one of the co-ordinating particles: jála 'and', gábe 'and', jádi 'and', aláí 'but', hapÉ 'but', áí 'for', ála 'for', huhút 'and at the same time'. Elements in the second of two co-ordinate clauses which would otherwise be identical with elements in the first are commonly deleted, e.g. manaìli ma ibàna dÒppak gíjjaN jala dibÈREN ma sàda Óbbun 'She looked up and saw

a cloud' (for manaìli ma ibàna dÒppak gíjjaN jala dibErEN ibàna ma sàda Óbbun, in which the first occurrence of ibàna is a subject noun phrase and the second an agent noun phrase). Examples follow:

jála 'and': diparùar ibana ma akka isìan ni hadaNhadaNánna jala dipàNan nasída ma akka sipaNànOn ì 'She took out the contents of her bag and they ate the food', lào ma musÈ namarbaju í jala girà dO múlak dOhOt akka silEanlÈan í 'The girl left again and immediately returned with the gifts', matútuN ma amatta ì jala máTE ma ibàna 'The old man got burnt and he died', duànsa nasída naEN maNÓli ibàna jala dàN adÒN na ÒIO tálu 'Both of them wanted to marry her and neither was willing to admit defeat', nàkkOk ma ibàna tu táNga jala sò ma di jòlo ni píttu 'She climbed the ladder and paused in front of the door', rò ma musE bòruna í jala maccai lÒNaN nasida mamÈrEN ùli ni òbukna í 'His daughter came again and they were astonished at the beauty of her hair'.

gábE 'and': martabúni ma ibàna gabE dàN bòi dàpOt nasída ibàna 'She hid herself and they were unable to find her', dipaNidO hamù dO sada panuhùhan dahánOn gabE dilEan ibàna dO na pinaNìdOmuna í 'You asked for one panuhùhan of rice and he gave (you) what you asked for', naEN ditàkkup ma pìdOn í gabE makkuk í dO hòna 'He wanted to seize the bird but what he hit was the cup'.

jádi 'and': tarbegè ma tu làE na mardakdànak ibOtóna jadi marsàkkap ma ibàna laO manOpótsa 'It came to the knowledge of the brother-in-law that his sister had had a child and he decided to go and see her', dibErEN nasída ma sada háu jadi láO ma nasida tusì 'They saw a tree and went to it'.

alái 'but': sùkkup dO hagabeónna alai dàN adON dakdanaknasída 'His wealth was considerable but they had no children', ditogihOn nasída ma ibàna máNan alai dijúa dO 'They pressed her to eat but she refused', láO dO ibàna alai diulàkhOn dO musE ró 'He went away but came back again', didùNduN ma dOhOt taNàna laO manbúatsa alai dàN tarduNdúNsa 'She reached out with her hand to grasp it, but she could not reach it'.

hapÉ 'but': martabúni ma ibàna hapE rò dO hahana ì naEN maNalláNsa 'He hid himself but his brothers came with the intention of eating it', nàEN diEàki panakkO ì ma hutìN ì tu tÓru hapE mamittOr marauaN ma bian í 'The thief was about to chase the cat downstairs but immediately the dog barked'.

ái 'for': amàN mùlak ma hò mandapOthOn ínaN ai ì dO dumèNgan tu hita bé 'Father! Go back to mother, for that is best for us both', maccai malÉ au jadi annòn pE au marídi ai nàEN girà au máNan 'I am very hungry and so I will bathe later, for I would like to eat immediately'.

ála 'for': disakkap r0hanasìda ma pagodàNh0n p0s0p0s0 í ala daN adON tubunasìda saddíri 'They decided to bring the baby up, for they had no children of their own', dàN bòi manaN ìsE sian nasida dapÓtan ibàna ala daN marbàgas jÒlma tu bégu 'Neither of them can have her, for human beings do not marry spirits', dib0t0 ibàna d0 Ón ala adON hamalÒ0n umb0t0 na buní di ibàna 'She knew this for she had the ability to know about things which were hidden from her'.

huhút 'and at the same time': marÉddE ma ibàna huhut martÓpak 'She sang and at the same time clapped her hands', dipukkul ibàna ma tuNganEbòruna í huhut dikÓk 'He hit his wife and said at the same time', diparsuràgE babìat í ma ibàna huhut dipáNan 'The tiger tore him to pieces and ate him'. It may be noted that huhut conjoins clauses which have identical subjects or identical agents, and deletion of the second occurrences of these elements appears to be obligatory.

2. SUBORDINATE CLAUSES

A subordinate clause stands in a special relation to some other clause, namely the subordinating clause. A subordinating clause may be a principal clause or another subordinate clause. Both subordinate and principal clauses may be co-ordinated. The relation of subordinate clause to subordinating clause will be referred to as subordination.

There are two types of subordination. In the first the subordinate clause is a sub-constituent of the subordinating clause. For example, in the sentence duN sùn nasida marháta múlak ma dàtu i 'After they had finished talking the medicine-man went home', the subordinate clause is a sub-constituent of the predicate of the principle clause múlak ma 'went home'.

In the second type of subordination the subordinate clause and the subordinating clause are constituents on the same level. Such sentences have three immediate constituents: the subordinating clause, the subordinate clause, and the particle introducing the subordinate clause. This type of subordinate clause is introduced by one of the following particles: ása 'in order that', áut, autsúra, autsugári 'if (counterfactual)', marádu 'so much so that', mólo 'if', náNpE 'although', sugári 'if (counterfactual)'. Examples follow:

ása 'in order that': àha baEnònhu asa loasÓnmu àu 'What shall I do so that you will allow me (to do it)?', tabàEn ma j0lo sada pÉsta asa tasúkkun akka s0bbà0n 'Let us hold a feast in order to invoke the spirits'.

áut, autsúra, autsugári 'if (counterfactual)': aut disí au daN màsa ì 'If I had been there this would not have happened', autsúra mamÓra ma nian àu nùNna lào tu médan àu 'If I were only rich I would go to Medan alright', autsugári hutuh0r hiàn ma mòt0r í nuNna mamÓra au 'If I had bought that car I would have been rich'.

marádu 'so much so that': lònNa d0 nasìda maràdu s0 tard0k nasìda mananáha 'They were so amazed that they could say nothing'.

mÓlO 'if': mÓlO ró h0 tus0n marsogòt dis0n ma àu paimàh0n hò 'If you come here tomorrow I will wait for you here', mÓlO máNan àu ìkk0n mátE ma àu 'If I eat I shall have to die', mÓlO nàEN dóh0t h0 manguruh0nsa hubóan pE h0 tu ibàna 'If you want to learn too I will take you to her'. It may be noted that mÓlO is also used with counterfactual force, e.g. mÓlO mam0ra hiañ au nuNna tibù au la0 tu médan 'If I had been rich I would long since have gone to Medan'.

náNpE 'although': nàNpE digògo alògo ì maNÓbbus didatdati ibàna d0 manjàkkit hau í 'Although the wind was blowing hard he continued to climb the tree', nàNpE t0Ngí làkkat ni pìsaN 0n dàN daNgurh0n0nhu agiàha tu hó 'Although these banana skins are sweet I will not throw any of them to you'.

sugári 'if (counterfactual)': sugári disí au daN màsa ì 'If I had been there this would not have happened'.

Subordinate clauses of the first type can be classified into the following sub-types: adverbial, adjectival, and nominal.

Adverbial clauses can be replaced by adverbial phrases. For example, in the sentence mÓlOduN sàE h0 láo ma hìta 'When you have finished let us go', the adverbial phrase mÓlOduN sàE h0 'When you have finished' can be replaced by an adverbial phrase such as duN í 'thereupon'. Adverbial clauses are introduced by: dúN 'after', saléleN 'while, as long as', mÓlOduN 'when', paítte 'until', disí 'as soon as', disíduN 'as soon as', tágan (na) 'while', addÓraN 'while', dúNh0n (na) 'after', tágan (na) s0, addÓraN s0 'before'. Examples follow:

duN 'after': duN mùlak jòlmana ì sian páccur disúkkun raja í ma 'After his wife had returned from the bathing place the rajah asked', duN tòlu bùlan ibàna di t0bbak í tubutubúan ma musE ináNna 'When she had been in the forest three months, her mother gave birth again', hàbaN d0 pidoN í duN huj0n0ki hau ì 'The birds flew away when I approached the tree'.

saléleN 'while, as long as': iNot0nhu d0 ì saleleN maNÓlu au 'I shall remember that as long as I live', ad0N na màsa saléleN na la0 í au 'Has anything happened while I have been gone?'.

mó10duN 'when': m010duN sìduN 0n marhúa àu 'What shall I do when this is finished?', m010duN di jabu au amatta d0 hurupi 'When I am at home I help my father', m010duN tàN au nàEN marsaba saddíri d0 au 'When I am big I want to have a rice-field of my own'.

paítte 'until': paíma dis0n paitte múlak au 'Wait here until I come back'.

disí 'as soon as': disí dib0t0 ibàna í 'mùlak ma ibàna tu jábu 'As soon as he learned of this he went home', disí pèut mutiha ì g0mak ma 'As soon as the pearl falls grab it!', disí màsuk nasida tu aEk ì ró ma sada pìd0N 'As soon as they reached the river a bird came'.

disíduN 'as soon as': disíduN dil0tak ibana niolina í tig0r ma bukkukna í 'As soon as he hit his wife her back became straight', disíduN múlak ibana là0 ma akka bòru ni raja ì mandap0th0n ibàna 'As soon as he returned the rajah's daughters came out to meet him'.

tagan 'while': tagan dis0n ibàna s0naN d0 au 'While he was here I was happy', tagan na màNan í àu ró d0 ibàna 'While I was eating she came'.

add0raN 'while': add0raN maN0lu ibàna 'While he was alive'.

dúNh0n (na) 'after': dùNh0n na rò í àu dàN ad0N na mása 'After I came nothing happened'.

tagan (na) s0, add0raN s0 'before': tàgan s0 máNan àu j010 hud0k d0 taNíaN 'Before I eat I first say a prayer', tàgan na s0 maNan í d0pE àu nuNna marmulákan j0lma 'Before I had eaten yet people already left', add0raN s0 rò ibàna tu hùta í maNajàri d0 ibàna di médan 'Before he came to the village he taught in Medan'.

A clause which can be replaced by an adjectival phrase is an adjectival, or relative clause. For example, in the sentence ad0N d0 amaàma na s0 ad0N obúkna 'There was a man who had no hair', the relative clause na s0 ad0N obúkna 'who had no hair' can be replaced by an adjectival phrase such as na p0gos 'poor'.

Relative clauses are introduced by the relativising particle na, which takes the place of the relativised noun phrase. Only subject noun phrases may be relativised. Thus amaàma 'man' in the sentence mapítuN d0 amaàma í 'The man was blind' may be relativised to yield a noun phrase amaàma na mapítuN í 'The man who was blind', or sàda amaàma na mapítuN 'A man who was blind'. It may be noted that in the definite noun phrase amaàma na mapítuN í 'The man who was blind' the demonstrative í 'the' appears at the end of the relative clause. This may be compared with the position of the demonstrative in noun phrases containing adjectival phrases, e.g. amaàma na p0gos í 'the poor man'.

To relativise an object noun phrase it is necessary first to convert the sentence into the passive. Thus the object noun phrase *róti* 'bread' in the sentence *manEàti róti d0 àu* 'I cut the bread' cannot be directly relativised. On the other hand, the passive sentence *huseáti d0 ròti* 'I cut the bread' can be used as a basis for the relative clause *ròti na huseàti í* 'The bread that I cut'. Similarly it is not possible to relativise an agent noun phrase unless the sentence is first converted into the active, e.g. *disEàti boruboru í ma attON ròti* 'The woman did in fact cut the bread' would yield *borubòru na manEàti ròti í* 'The woman who cut the bread'.

In relative clauses containing a passive verb it is the first passive which is used if the agent is first person singular or first person plural inclusive, otherwise the third passive form is used. Examples: *pìra na hugàdis í* 'the egg which I sold', *pìra na tagàdis í* 'the eggs which we (inclusive) sold', *pìra na ginàdismu í* 'the egg which you sold', *pìra na ginàdisna í* 'the egg which he sold', *pìra na ginàdis ni ràja í* 'the egg which the rajah sold', and so forth.⁶

There is one exception to the rule that only subject noun phrases may be relativised. In a sentence containing the verb *adÓN* 'there is, x has' it is possible to relativise the third constituent of a *ni*-construction appearing as the subject of the sentence. It is possible, for instance, to relativise the constituent *amaàma í* 'the man' in the *ni*-construction contained in the sentence *adÓN d0 pìtu bóru ni amaàma* 'The man had seven daughters'. When such a noun phrase needs to be relativised it is preposed with the relativising particle *na* immediately after it, and the enclitic pronoun *-na* is attached to the first constituent of the *ni*-construction, *ni* itself being deleted. In this instance, therefore, *amaàma* is preposed, the relativising particle is placed before it, and the enclitic pronoun *-na* is attached to the word *bóru* 'daughters'. The resultant relative clause is *amaàma na pìtu borúna* 'A man who had seven daughters'. Thus in the sentence *adÓN d0 pìtu bóru ni amaàma* 'The man had seven daughters', the noun phrase *amaàma í* 'the man' is treated syntactically as if it were the subject of the sentence.

Note that in interrogative sentences and sentences with topicalised subjects syntactic structures occur which may be analysed as relative clauses with deleted antecedents. Thus *ìsE na tumádda ibàna* 'Who knows him?' may be regarded as related to the sentence *ìsE d0 hàlak na tumádda ibàna* 'Who are the people who know him?' and *anáknà d0 na dijou ibàna* 'It was his son that he called' to **anáknà d0 hàlak na dijou ibàna* 'His son was the person whom he called'.

Before a fourth passive verb in such a clause *na* is replaced by *si*, e.g. *ísE d0 si t0p0t0nta disì 'Whom are we going to visit there?' (not *ísE d0 na t0p0t0nta disi), àha si usún0n 'What is there to carry?', si pujf0n d0 ibàna 'He is a person who must be praised', si inÓt0n d0 òn 'This must be remembered', adÒN d0 si usuNÓnhu 'I have something to carry', piga báju si boanÒnhu 'How many clothes shall I bring?', adÒN d0 si boàn0nnasìda bé 'Each of them is bringing something, there is something which each of them is bringing'.*

This may be the source of constructions such as the following: *lumàpp0t d0 indahan òn sian si natt0ári 'This rice is softer than yesterday's, i.e. softer than the rice we ate yesterday'.*

A clause which can be replaced by a noun phrase is a nominal clause. Thus in the sentence *dibErEN ibàna ma na disí d0 takkE ì 'He saw that the axe was there', the nominal clause na disí d0 takkE ì 'that the axe was there' can be replaced by a noun phrase such as borubòru í 'the woman'. Nominal clauses are introduced by the particle na. Examples follow:*

marnìpi ma ibàna na adON rò sa hàlak dolidòli tu labbúNna 'She dreamt that a young man came to her side', dibErEN matànhu d0 na ditàkk0 hó manuk ì 'I saw you steal the chicken with my own eyes', did0kh0n ibàna d0 na cubònnna d0 musÈ 'He said that he would try again', dib0t0 ibàna na g0àr0n musE dakdanak ì si gidf0n 'She knew that the child would later be called Gideon', did0k d0 na sò adÒN bòru ni hàlak na Ól0 di ibana 'He said that no woman (lit. no daughter of a person) would have him'.

In some instances the introductory *na* is deleted, e.g. *dib0t0 ibàna d0 tibù nàEN màsa sáhít disì 'She knew that there was soon going to be an epidemic there', hupaulà s0 hubót0 'I pretended that I did not know'.*

Interrogative clauses are a sub-class of nominal clauses. They are introduced by the particle *mánaN*. In yes-no interrogative clauses the particle *na* commonly occurs after *mánaN*. Examples: *daN hubót0 manaN na údan d0 'I do not know whether it is raining', bèrEN j0 manaN na údan d0 'Please look and see if it is raining', sùkkun j0 manaN na nàON là0 d0 ibàna 'Ask him, please, whether he went'.*

In supplement interrogative clauses an interrogative particle appears between *mánaN* and *na*, e.g. *marbadài d0 alògo d0h0t mataniàri manaN ìsE sian nasìda na gumógo 'The wind and the sun quarrelled as to which of them was stronger', asa dibòt0 manaN àha d0 diùla di tONan dalan la0 tu haúma 'so that he might know what she was doing on the way to the rice-field', disùkkun ma manaN àha d0 alàna umbàEn na marsàhit anàkna í 'He asked what the reason was that his son was ill'.*

Imperative clauses, likewise a sub-class of nominal clauses, are introduced by the particle *asa*, e.g. *dipaNid0 nasida ma asa dil0as nasida lá0 tusi* 'They asked that they might be allowed to go there', *did0k ibàna ma tu nasida asa baEn0nnasida sada ganaganáan* 'He told them to make an affigy', *hupaNid0 d0 asa unaN ró ibana* 'I asked him not to come'. Negation in imperative clauses is expressed by *únaN*, see the last example cited.

In subordinate clauses the negative particle *daN* is replaced by *s0*, e.g. *hupikkir d0 na s0 ró h0* 'I thought that you were not coming', *dik0k hò na s0 malé h0* 'You said that you were not hungry', *uhum0nhu ma h0 d0h0t úhum na s0 pinaNidóm* 'I will give you the punishment you did not ask for', *nàsa na s0 margÈlIEN ikk0n manbòan uppéti* 'All those who have no children must pay a tax'.

Clauses are for the most part lineally ordered. There are, however, cases of discontinuous clauses, e.g. *là0 ma ibàna duN sàlpu piga àri tu jàbu ni tuláNna* 'She went, after a few days had elapsed, to her uncle's house'.

Subordinate clauses introduced by *ása* 'in order that', *marádu* 'so much so that', *na* 'that' occur after their subordinating clauses. Clauses introduced by *áut*, *autsúra*, *autsugári*, *sugári* 'if', *mólo* 'if', and *náNpE* 'although' occur before their subordinating clauses.

In other cases either order is possible. For example, a clause introduced by *dún* 'after, when' occurs either before or after its subordinating clause, e.g. *hàbaN d0 pidoN í duN huj0n0ki hau í* 'The birds flew away when I approached the tree', *duN mùlak jòlmana i sian páccur disúkkun raja í ma* 'After his wife had returned from the bathing place the rajah asked'.

F. SENTENCE-FRAGMENTS

The following types of sentence-fragments occur:

1. Interjections, e.g. *bá* 'Come now!', *alé* 'Oh!', *b0* exclamation of astonishment, *inaNoi ináN* and *amaNoi amáN* exclamations of pain or sorrow, *ná* 'Here you are! Take it!'.
2. Greetings and polite formulas, e.g. *sattábi* 'Excuse me!', *hòrashóras* 'Hello! Good-bye!', (*sai*) *hóras ma di hò* (or *hamù*) 'Greetings to you!', *mauliátE* 'Thank you!'. The words *ninna hamú* or *ràjanamí* are often added at the end of utterances to indicate respect to one's interlocutor.
3. Vocative expressions, e.g. *amán* 'Father!', *ináN* 'Mother!', *inaNudá* 'Aunt!', *apúl* 'Apu!', *silalahí* 'Silalahi!', *hutíN* 'Kitty!', *hulís* 'Shoo!' (uttered in order to scare away marsh-harriers). Note that in

cases where a kin term has an alternative form with an extra final -N, it is the longer form which appears in vocative expressions, e.g. amáN 'Father!' (not *ama), haháN 'Older brother! Older sister!'. In the case of ibóto and ít0 'sibling of the opposite sex to ego', the corresponding vocative expression is always ító. There are also special vocative expressions corresponding to ának 'son' and áNgi 'younger sibling of the same sex as ego', namely anak-á (phonemically /anahá/) and aNgi-á.

4. Short answers, e.g. Ó10 'Yes!', dáON 'No!', tutù situtú 'Precisely!', di médan 'In Medan', as an answer to a question such as di dila hamu marínánan 'Where do you live?'.

N O T E S

1. See Van der Tuuk, *Tobasche spraakkunst* (1864-67), paragraph 165*. I cannot agree with Van der Tuuk that the function of the introductory *na* is to nominalise the predicate. He cites the sentence *na mabiar d0 h0 'You are afraid'*, and suggests translating it *Die bevreesd is zijt gij, gij zijt een lafaard* ('*The one who is afraid is you, you are a coward*'). My informants express that meaning by the sentence *h0 d0 na mabiar*, in which *na mabiar* is analysable as a relative clause. Warneck cites the following sentences: *na r0 10s0khu 'Ich bin faul, ich mag nicht'* (1906:120, Warneck-Winkler 1977:149), *na 010 d0 au 'Ich will'* (1906:131, Warneck-Winkler 1977:160), *na r0 rimásna 'Er wird zornig'* (1906:165, Warneck-Winkler 1977:203), *na r0 údan 'Es kommt Regen'* (1906:227, Warneck-Winkler 1977:279). It is conceivable that such sentences are nominal clauses with an understood subordinating clause, e.g. *na r0 údan '(I see) that it is raining'*. The matter clearly deserves more study.

2. Van der Tuuk classifies *d0* and *ma* as emphatics (*nadrukwijzers*), along with *áNg0 'as regards'*, *fa 'as regards'*, *pE 'in future'*, *d0pé 'still'*, *musé 'again'*, and *bE 'already'*; see *Tobasche spraakkunst* (1864-67), paragraph 165. But *áNg0* and *fa* clearly do not belong in this class at all (I analyse them as prepositional markers of topicalised noun phrases), and *d0* and *ma* are so peculiar in their syntactic behaviour that they constitute a class by themselves. The remainder I have called predicate satellites (see section B3 of this chapter, pp.82-86). Nababan (1966:82) refers to *d0* as a predicate marker in sentences such as *1á0 d0 ibàna*. See also Nababan 1966:93.

3. Silitonga (1973:2) suggests that *d0* has the effect of emphasising the preceding word. Thus he sees *marsiajar ibana natt0ari 'He studied*

yesterday' as an answer to the question *'What was he doing yesterday?'*, while marsiajar d0 ibana natt0ari 'emphasises his activity: marsiajar *'to study*' as opposed to other activities' (1973:2). It is true that the d0 appearing in topicalised sentences after the preposed subject does indeed serve to emphasise the element which precedes it, but the same cannot be said of the d0 occurring in other types of sentences.

4. See Silitonga 1973:53-94 for many interesting examples of topicalisation.

5. Silitonga (1973:95ff) points out that the sentence-particle na occurs in questions, but he fails to mention the fact, known already to Van der Tuuk, that these questions are matched by positive statements also introduced by the sentence-particle na. Hence the preposed na cannot be regarded as a way of forming questions, as Silitonga appears to maintain.

6. See Nababan 1966:28. It is perhaps worth pointing out that the relativiser na may co-occur with the adjectiviser na in the same clause, e.g. sada hariàra na màccai na tìbbo *'a banyan tree which was very tall'* (compare màccai na tìbbo d0 hariàra 0n *'this banyan is very tall'*). Thus although adjectival phrases and relative clauses are syntactically related they are clearly distinguishable. The adjectiviser na causes the stress on an accompanying adjective to move to the penult; the relativiser na does not have this effect, e.g. àÈk na páÈt *'bitter water'* (noun phrase consisting of a nominal preceded by an adjectival phrase), àÈk na paÈt *'water which is bitter'* (noun phrase consisting of a relative clause preceded by a nominal antecedent).

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